

APPENDIX C

TYPICAL RIGHT-OF-WAY CONSTRUCTION DRAWINGS



Transcontinental Gas Pipe Line Company LLC

TYPICAL RIGHT-OF-WAY CROSS-SECTION
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
M.P. 1681.00 TO M.P. 1691.17
LANCASTER COUNTY, PENNSYLVANIA

F-XS-QUAR-D-01

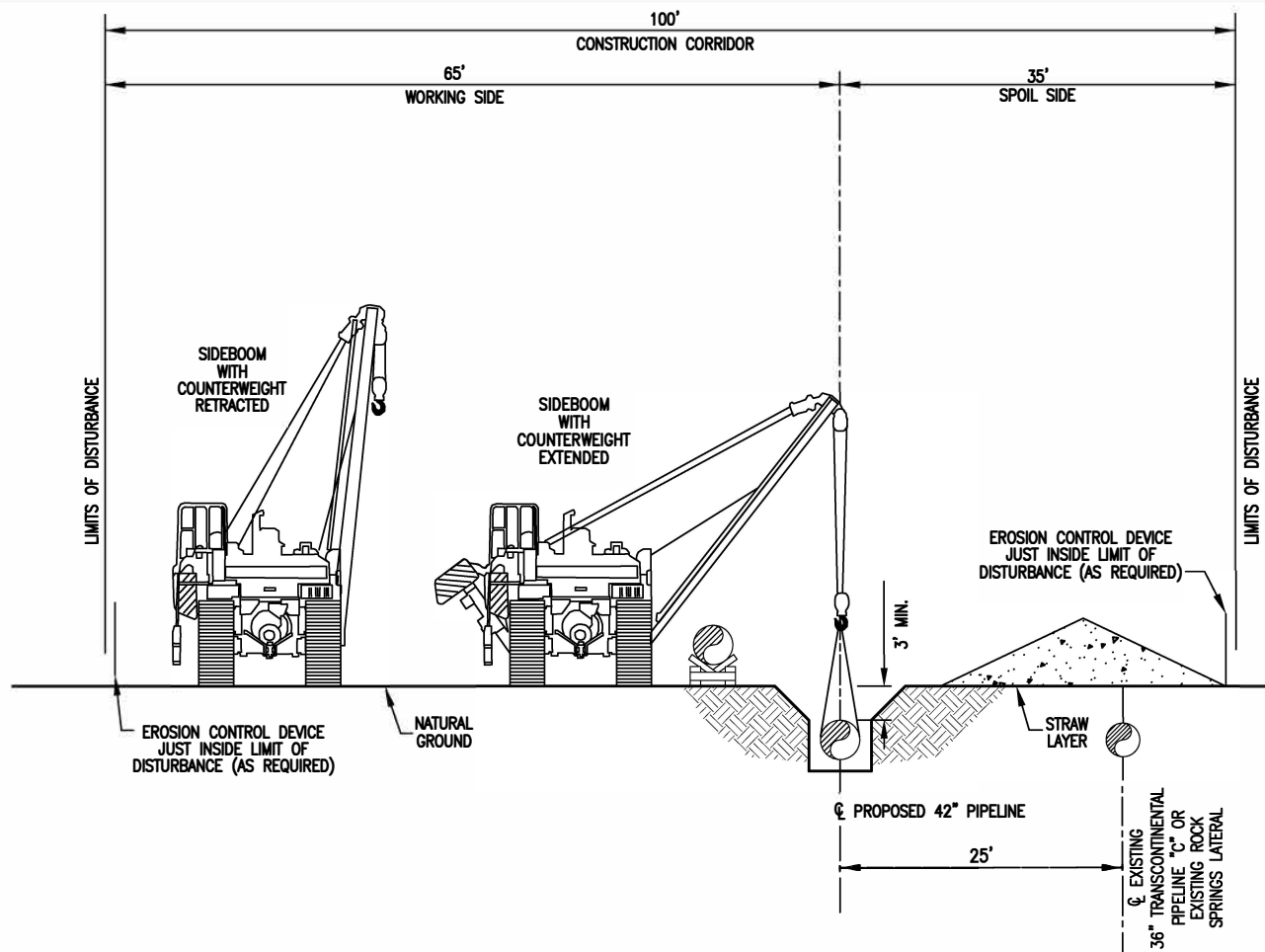
DATE: 03/20/2017 REV. 0

F-XS-QUAR-D-01-PKG
Issued for FERC Filing
Rev. 0
03-20-17


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F-XS-QUAR-D-01	01		COVERSHEET	0	03/20/2017
F-XS-QUAR-D-01	02		TABLE OF CONTENTS	0	03/20/2017
F-XS-QUAR-D-01	03	100	NO TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/20/2017
F-XS-QUAR-D-01	04	120-160	NO TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.	0	03/20/2017
F-XS-QUAR-D-01	05	125-180	TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	0	03/20/2017
F-XS-QUAR-D-01	06	85-100	NO TOPSOIL STRIPPING- WITHIN EXISTING TRANSCONTINENTAL PIPELINES	0	03/20/2017
F-XS-QUAR-D-01	07	220	NO TOPSOIL STRIPPING- WITHIN EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S.	0	03/20/2017
F-XS-QUAR-D-01	08	130	TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON SOUTH SIDE	0	03/20/2017
F-XS-QUAR-D-01	09	150-200	TOPSOIL STRIPPING- ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. ON BOTH SIDES	0	03/20/2017
F-XS-QUAR-D-01	10	125	NO TOPSOIL STRIPPING WITH A.T.W.S.	0	03/20/2017
F-XS-QUAR-D-01	11	75-85	WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/20/2017
F-XS-QUAR-D-01	12-15		CROSS-SECTION TYPICAL MILEPOST LISTING	0	03/20/2017



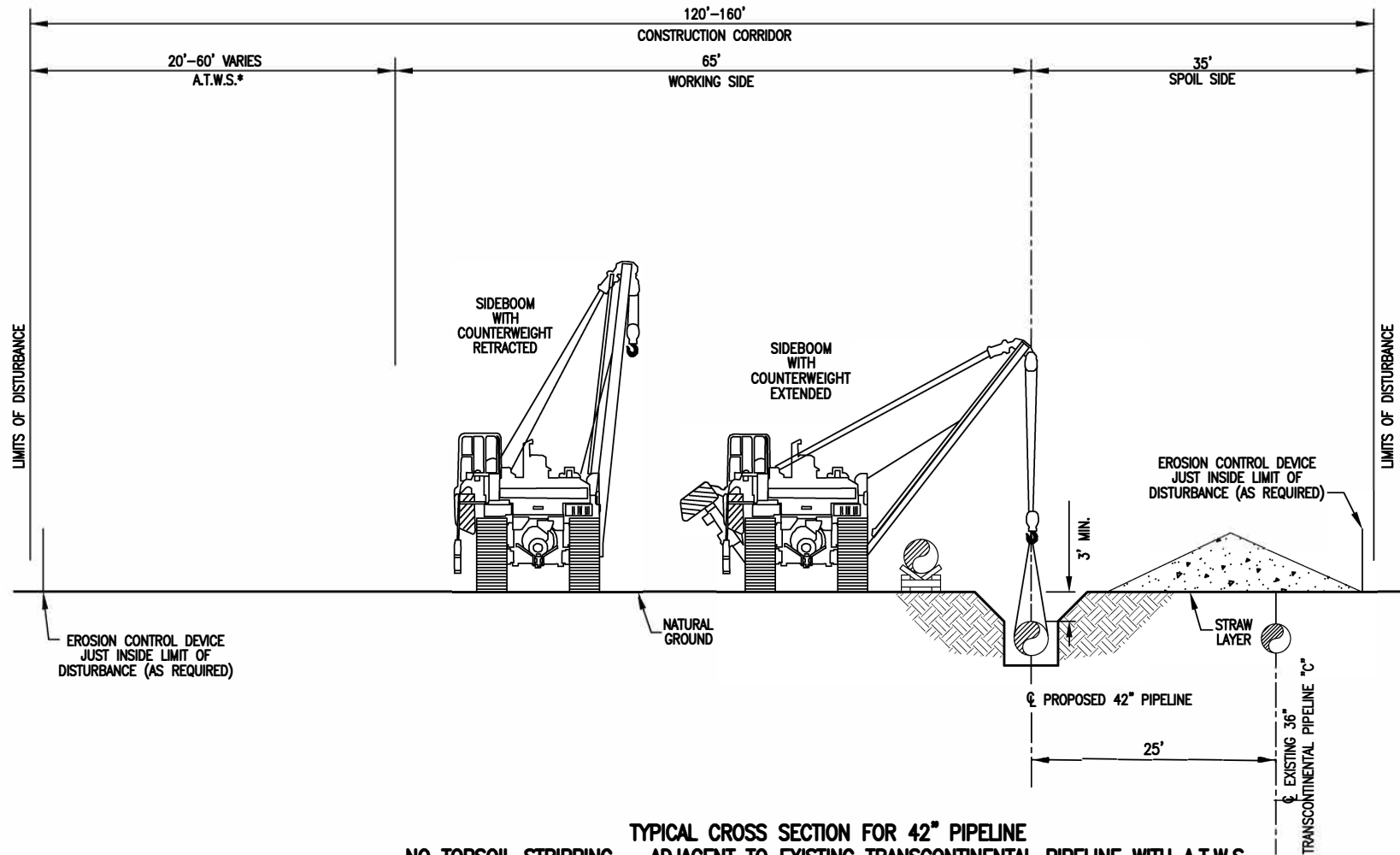
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							WO: 1185726			



**TYPICAL CROSS SECTION FOR 42" PIPELINE
NO TOPSOIL STRIPPING – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**


DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP LANCASTER COUNTY, PENNSYLVANIA				
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**TYPICAL CROSS SECTION FOR 42" PIPELINE
NO TOPSOIL STRIPPING – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.**

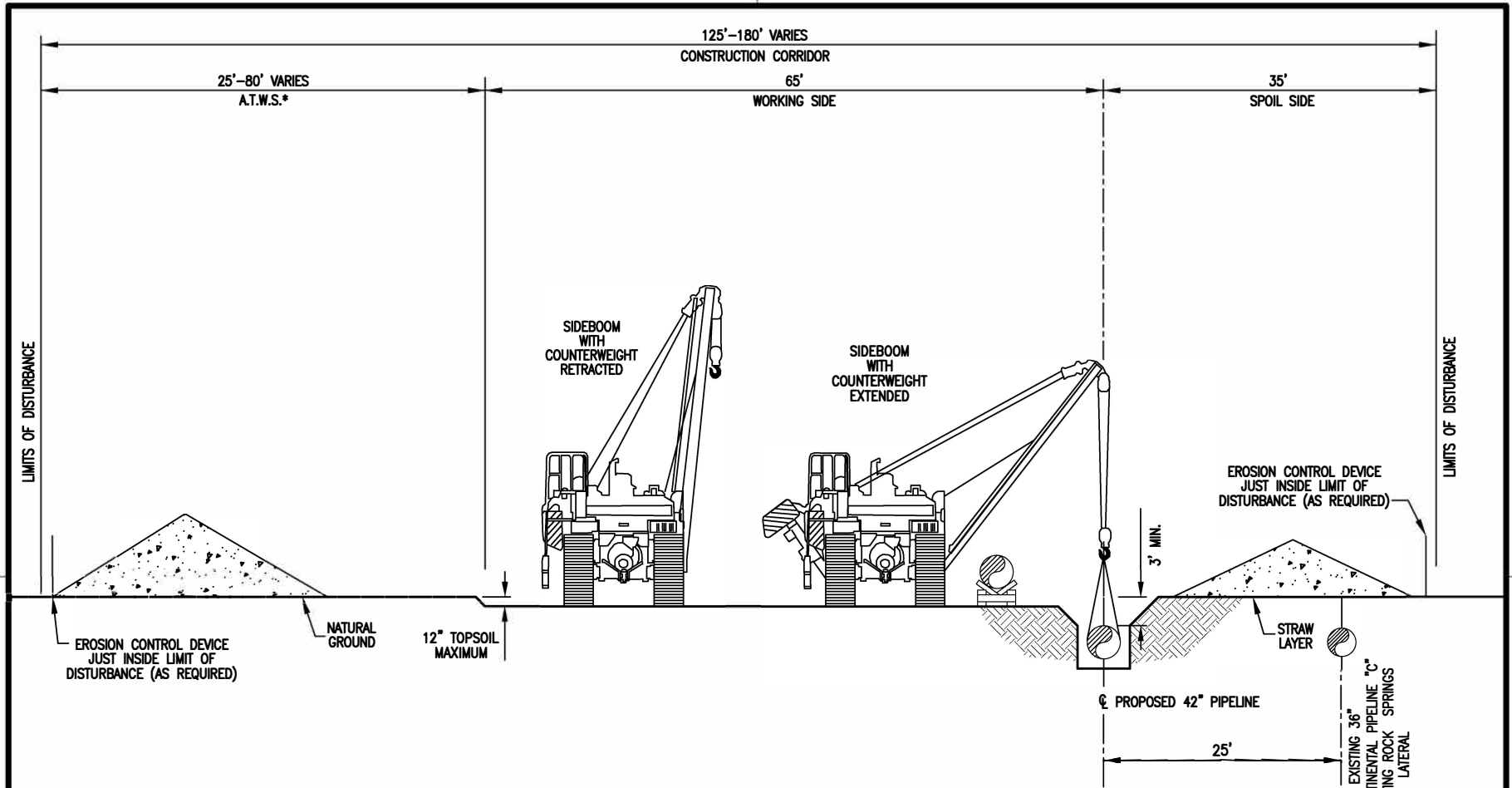
* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.

DRAWING NO.			REFERENCE TITLE				<div>TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP LANCASTER COUNTY, PENNSYLVANIA</div> <div></div>					
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							WO:	1185726				
												SHEET 04 OF 15

 **WOOD GROUP
MUSTANG, INC.**

SHEET **04**
OF **15**

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**TYPICAL CROSS SECTION FOR 42" PIPELINE
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE**

* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.


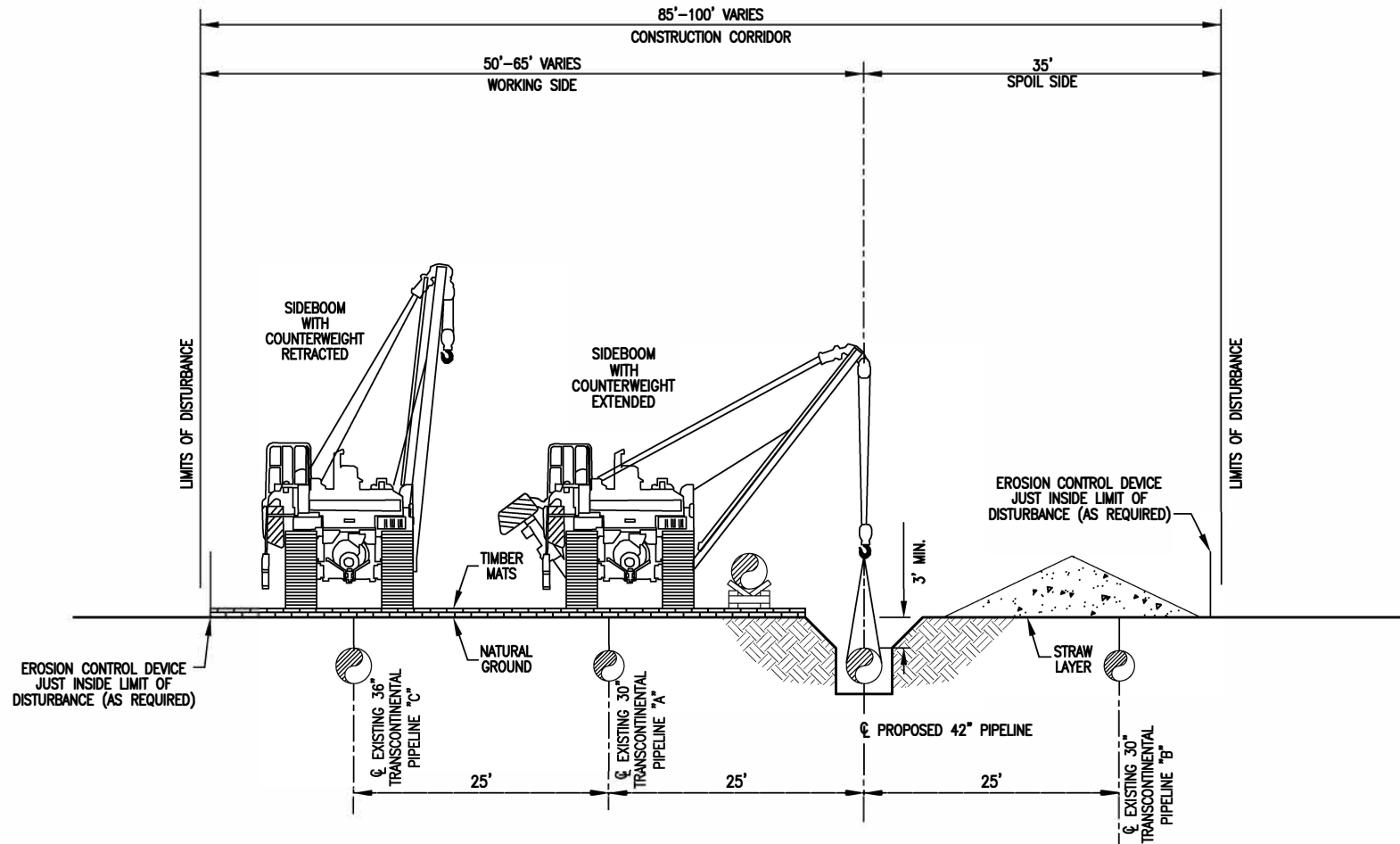
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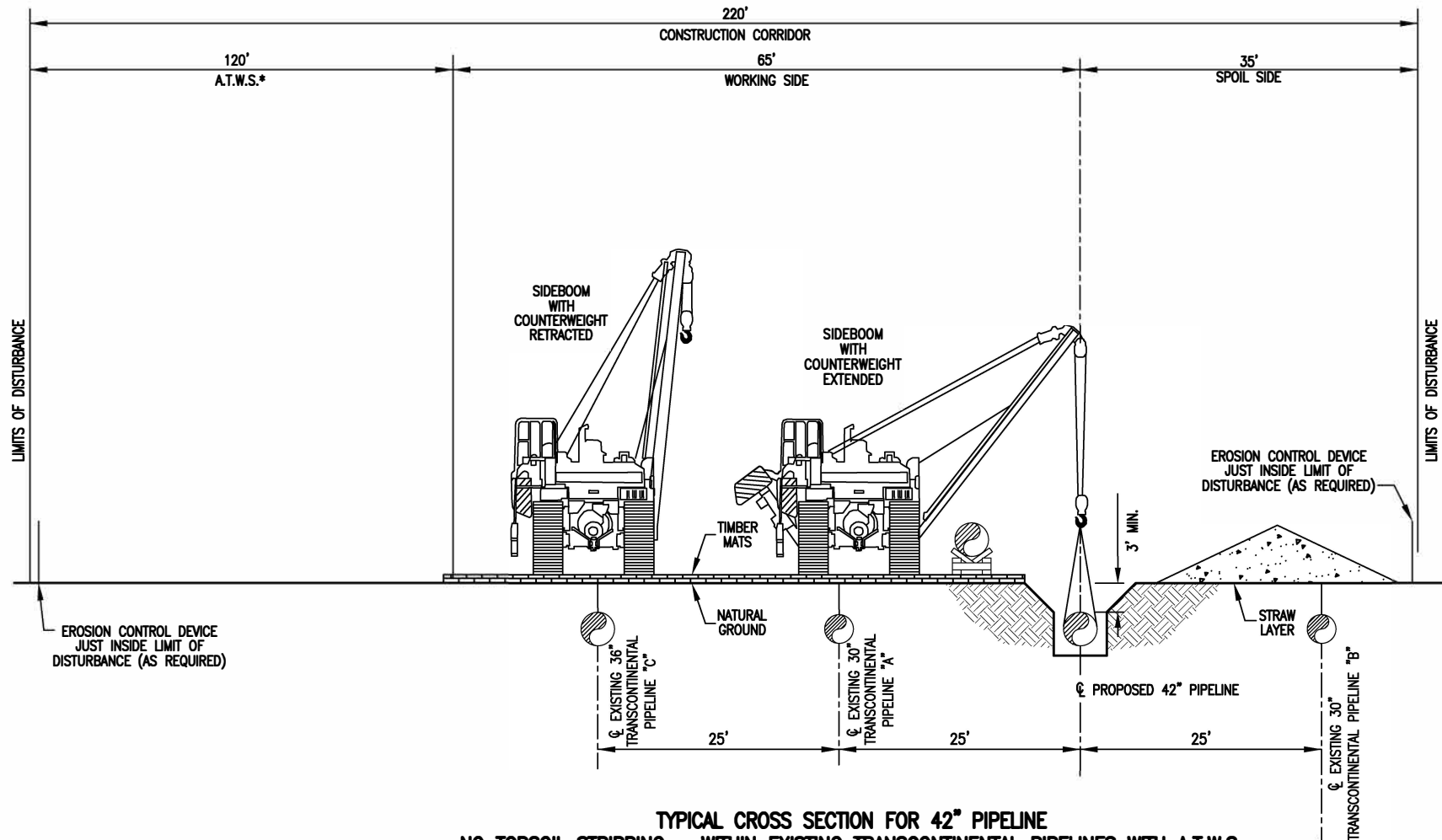
Figure 1A-2

SHEET 05
OF 15




**TYPICAL CROSS SECTION FOR 42" PIPELINE
NO TOPSOIL STRIPPING - WITHIN EXISTING TRANSCONTINENTAL PIPELINES**

DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP LANCASTER COUNTY, PENNSYLVANIA				
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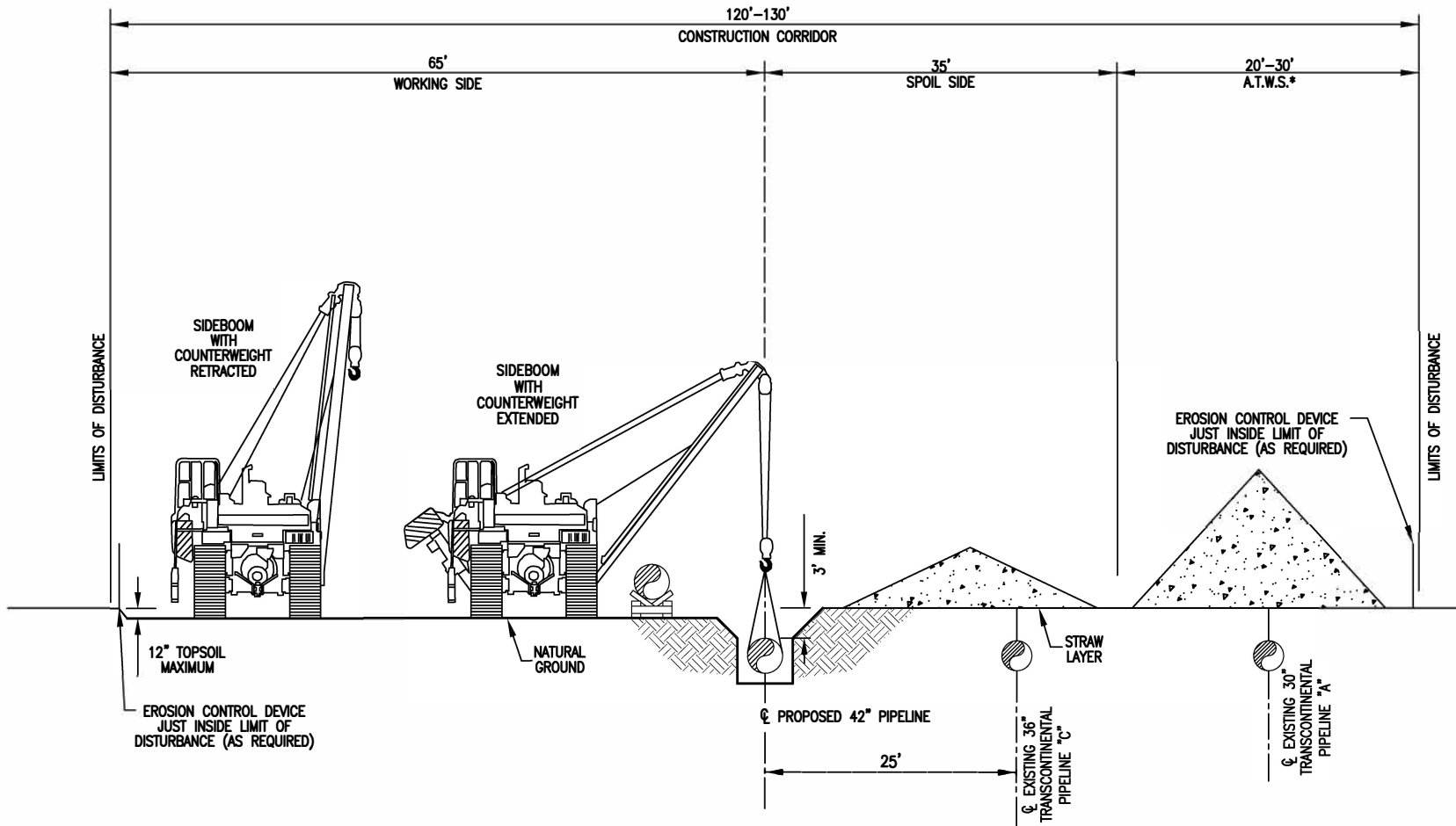


TYPICAL CROSS SECTION FOR 42" PIPELINE
NO TOPSOIL STRIPPING - WITHIN EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S.

* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, Crossover, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.


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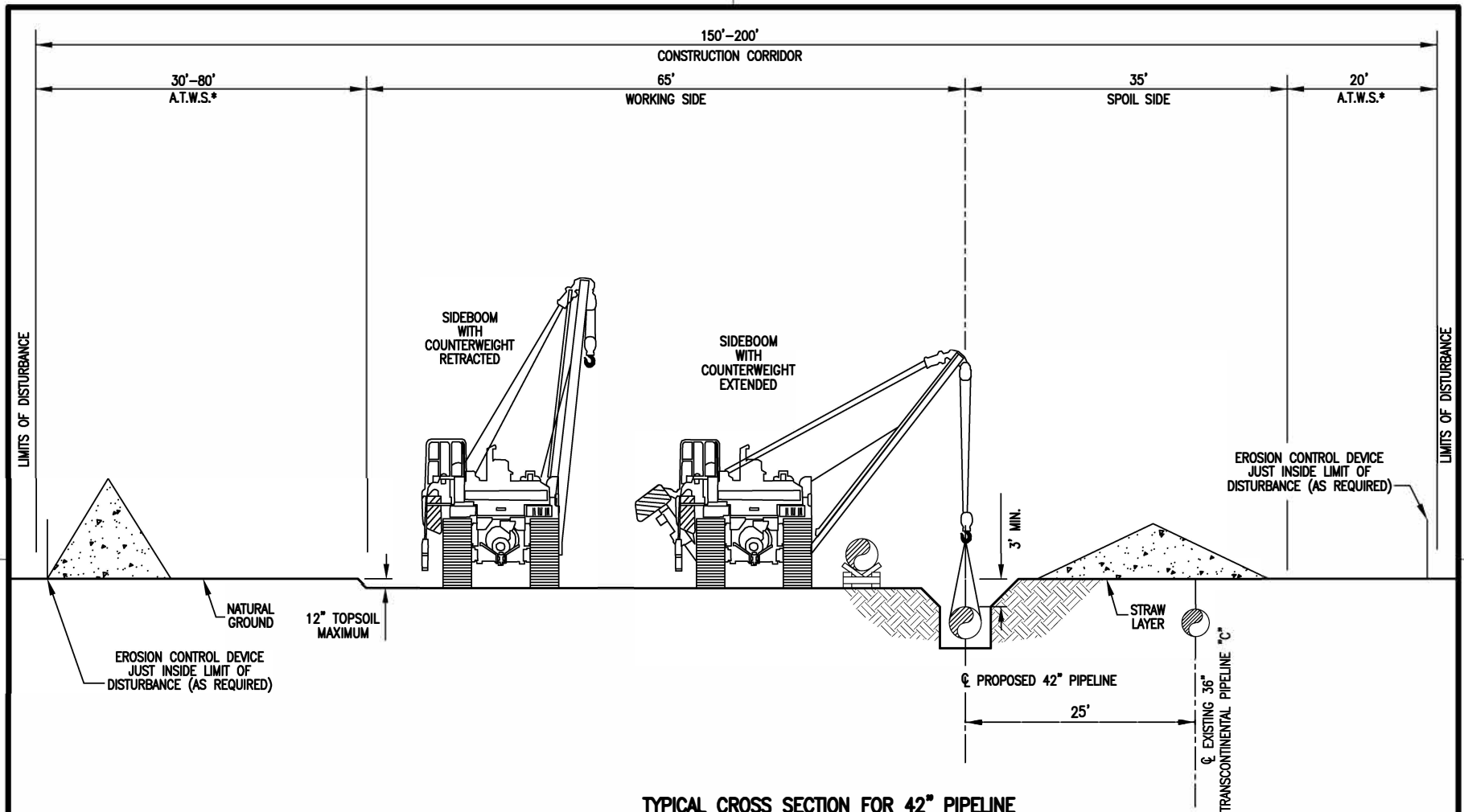


TYPICAL CROSS SECTION FOR 42" PIPELINE
TOPSOIL STRIPPING – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON SOUTH SIDE

* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.


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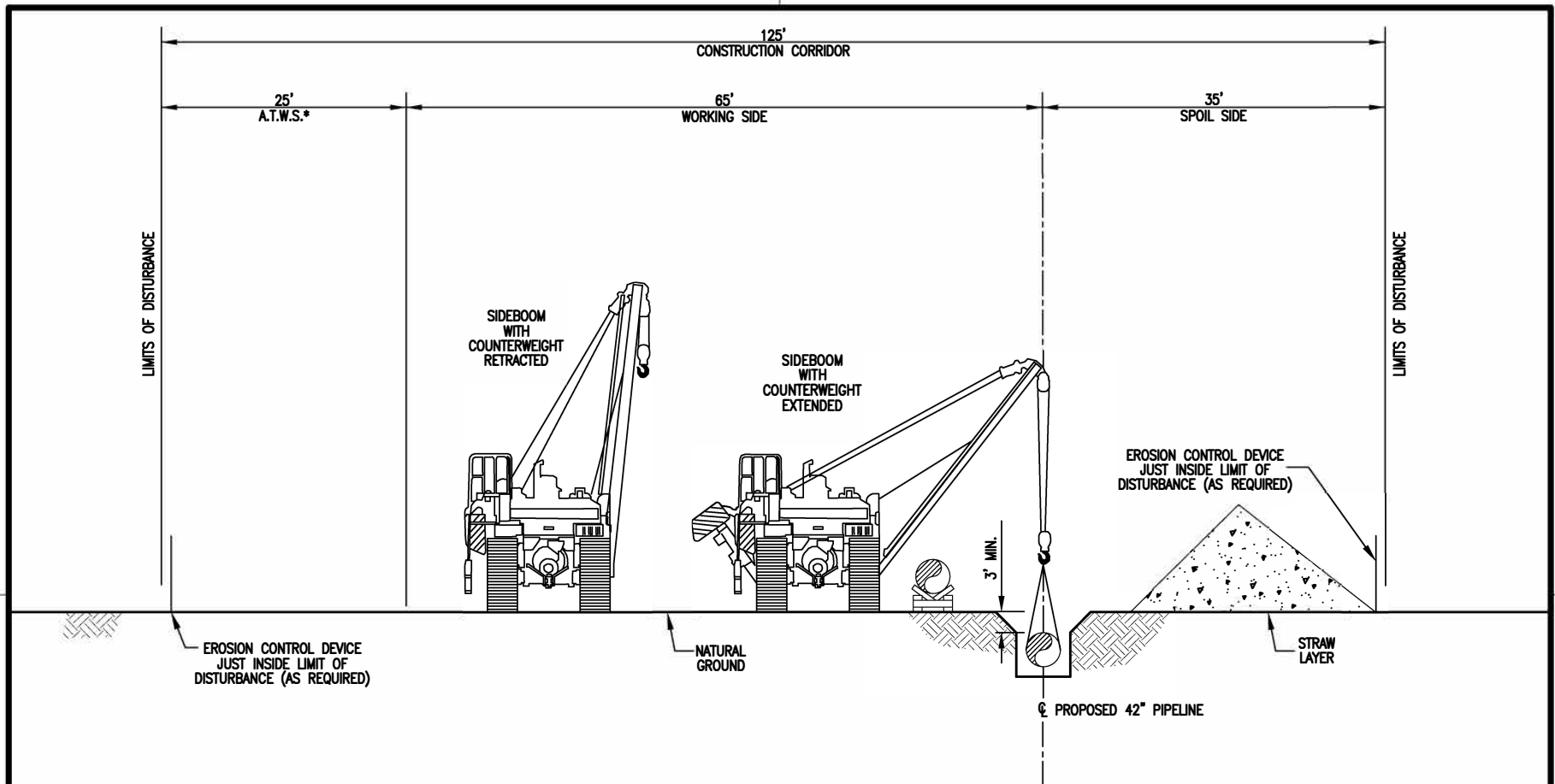
**WOOD GROUP
MUSTANG, INC.**



TYPICAL CROSS SECTION FOR 42" PIPELINE
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. ON BOTH SIDES


* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.

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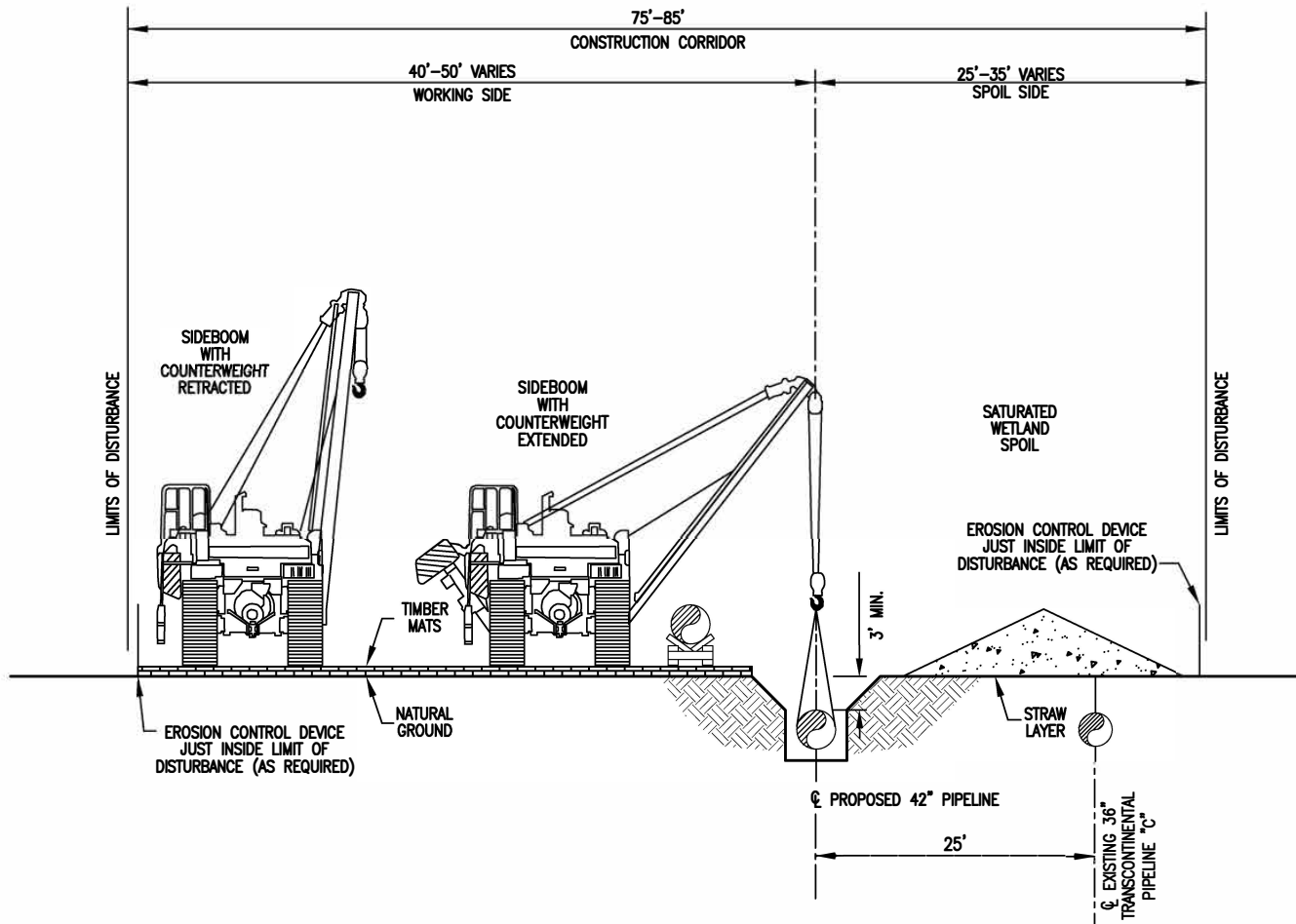


**TYPICAL CROSS SECTION FOR 42" PIPELINE
NO TOPSOIL STRIPPING WITH A.T.W.S.**


* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.

DRAWING NO.		REFERENCE TITLE					TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP LANCASTER COUNTY, PENNSYLVANIA					
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							WO:	1185726				
												SHEET 10
												OF 15

 **WOOD GROUP
MUSTANG, INC.**




**TYPICAL CROSS SECTION FOR 42" PIPELINE
WITHIN STREAM AND SATURATED WETLAND AREAS – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**

DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP LANCASTER COUNTY, PENNSYLVANIA				
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CROSS SECTION TYPICAL NAME	SHEET NUMBER	BEGIN MP	END MP
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1681.04	1681.18
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1681.18	1681.28
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.	4 of 15	1681.28	1681.35
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1681.35	1681.40
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES A.T.W.S. ON BOTH SIDES	9 of 15	1681.40	1681.45
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1681.45	1681.54
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1681.54	1681.57
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1681.57	1681.85
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1681.85	1681.86
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1681.86	1681.90
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1681.95	1682.07
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.	4 of 15	1682.07	1682.19
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1682.19	1682.49
NO TOPSOIL STRIPPING - WITHIN EXISTING TRANSCONTINENTAL PIPELINES	6 of 15	1682.54	1682.62
NO TOPSOIL STRIPPING - WITHIN EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S.	7 of 15	1682.62	1682.66
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1682.74	1683.30
NO TOPSOIL STRIPPING WITH A.T.W.S.	10 of 15	1683.37	1683.47
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	5 of 15	1683.47	1683.47
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1683.51	1683.55
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1683.59	1683.69
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1683.69	1683.74
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1683.74	1684.26


CROSS SECTION TYPICAL MILEPOST LISTING

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CROSS SECTION TYPICAL NAME	SHEET NUMBER	BEGIN MP	END MP
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1684.26	1684.28
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	5 of 15	1684.28	1684.74
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES A.T.W.S. ON BOTH SIDES	9 of 15	1684.74	1684.79
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1684.79	1684.96
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1684.96	1685.01
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1685.01	1685.15
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.	4 of 15	1685.15	1685.24
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES A.T.W.S. ON BOTH SIDES	9 of 15	1685.24	1685.31
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1685.31	1685.45
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1685.57	1685.67
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1685.67	1685.69
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1685.69	1685.77
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1685.77	1685.79
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1685.79	1685.14
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1686.81	1687.40
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1687.40	1687.41
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1687.41	1687.42
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1687.42	1687.45
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1687.45	1687.80
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES A.T.W.S. ON BOTH SIDES	9 of 15	1687.88	1687.92
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1687.92	1688.08
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1688.08	1688.14

CROSS SECTION TYPICAL MILEPOST LISTING

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							WO: 1185726				




**WOOD GROUP
MUSTANG, INC.**

SHEET 13
OF 15

CROSS SECTION TYPICAL NAME	SHEET NUMBER	BEGIN MP	END MP
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1688.14	1688.16
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1688.16	1688.42
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1688.42	1688.43
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1688.43	1688.45
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1688.45	1688.46
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1688.46	1688.52
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1688.52	1688.53
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1688.53	1688.55
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES A.T.W.S. ON BOTH SIDES	9 of 15	1688.55	1688.59
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1688.59	1688.70
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1688.70	1688.71
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1688.71	1688.75
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1688.75	1688.76
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.	4 of 15	1688.76	1688.79
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON SOUTH SIDE	8 of 15	1688.79	1688.84
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1688.84	1689.02
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1689.02	1689.04
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1689.04	1689.16
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1689.25	1689.33
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON SOUTH SIDE	8 of 15	1689.46	1689.49
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1689.49	1689.89


CROSS SECTION TYPICAL MILEPOST LISTING

DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP LANCASTER COUNTY, PENNSYLVANIA					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: VC	DATE: 03/14/17	ISSUED FOR BID:	SCALE: NTS	
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							APPROVED BY: EL	DATE: 03/14/17	Figure 1A-2		
							WO: 1185726				



CROSS SECTION TYPICAL NAME	SHEET NUMBER	BEGIN MP	END MP
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES A.T.W.S. ON BOTH SIDES	9 of 15	1689.89	1689.90
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1689.98	1690.28
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 15	1690.28	1690.38
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1690.38	1690.41
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES A.T.W.S. ON BOTH SIDES	9 of 15	1690.41	1690.45
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1690.45	1690.49
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1690.49	1690.55
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1690.55	1690.59
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON SOUTH SIDE	8 of 15	1690.59	1690.65
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1690.65	1690.87
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.	4 of 15	1690.87	1690.89
WITHIN STREAM AND SATURATED WETLAND AREAS - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	11 of 15	1690.89	1690.96
TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINES WITH A.T.W.S. ON NORTH SIDE	5 of 15	1690.96	1691.10

CROSS SECTION TYPICAL MILEPOST LISTING

DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP LANCASTER COUNTY, PENNSYLVANIA					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: VC	DATE: 03/14/17	ISSUED FOR BID:	SCALE: NTS	
0	03/20/17	AB	ISSUED FOR FERC FILING	1185726	EP	EL	CHECKED BY: EP	DATE: 03/14/17	ISSUED FOR CONSTRUCTION:	REV: 0	
							APPROVED BY: EL	DATE: 03/14/17	Figure 1A-2		
							WO: 1185726				



WOOD GROUP
MUSTANG, INC.



Transcontinental Gas Pipe Line Company LLC

TYPICAL RIGHT-OF-WAY CROSS-SECTION
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
M.P. 8.57 TO M.P. 12.00
MIDDLESEX COUNTY, NEW JERSEY

F-XS-MADI-D-01

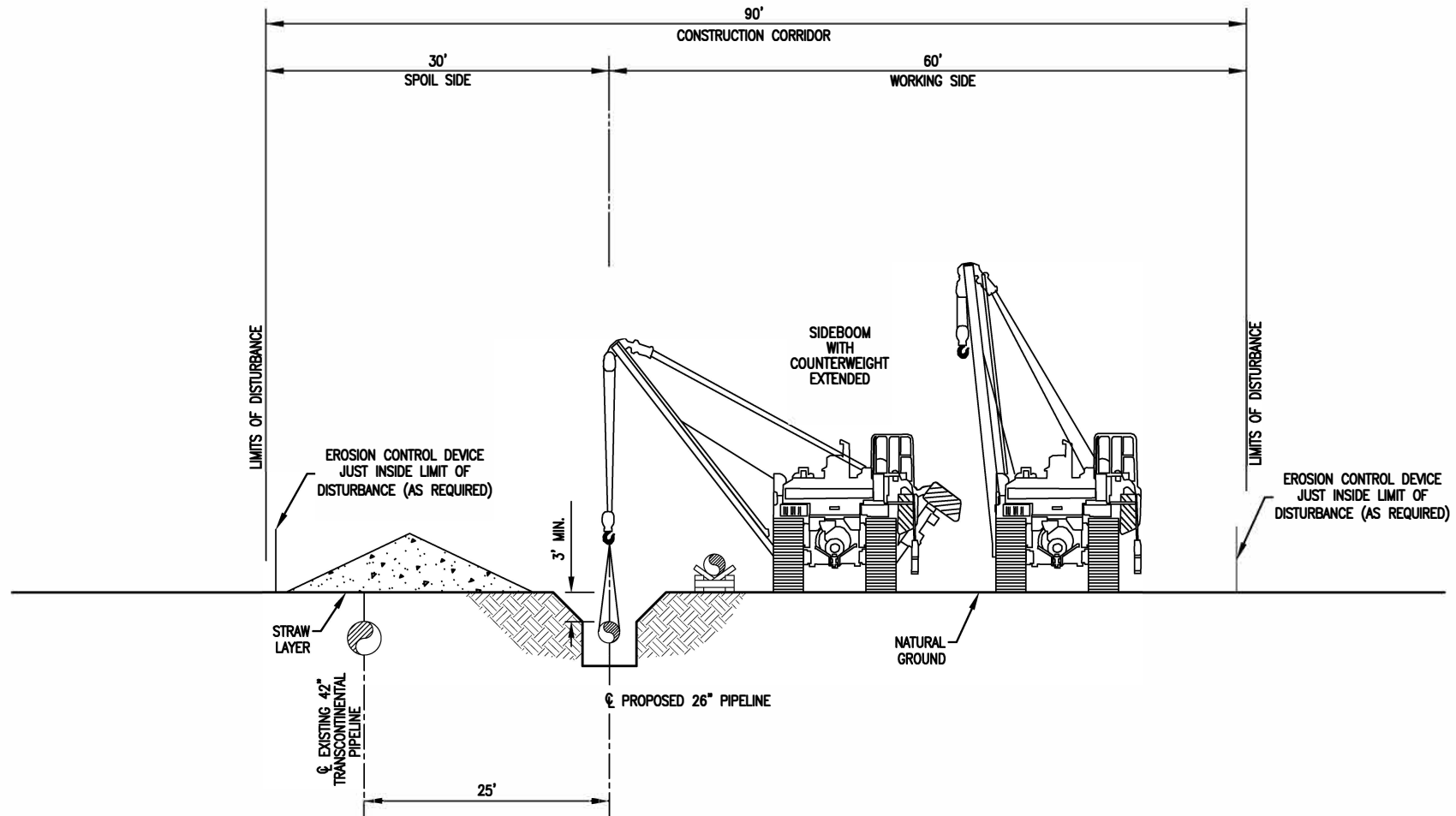
DATE: 03/20/2017 REV. 0

F-XS-MADI-D-01-PKG
Issued for FERC Filing
Rev. 0
03-20-17


DOCUMENT NAME	SHEET NUMBER	ROW WIDTH (FT)	DESCRIPTION	REVISION	DATE
F-XS-MADI-D-01	01		COVERSHEET	0	03/20/2017
F-XS-MADI-D-01	02		TABLE OF CONTENTS	0	03/20/2017
F-XS-MADI-D-01	03	90	TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/20/2017
F-XS-MADI-D-01	04	120-140	TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON SOUTH SIDE	0	03/20/2017
F-XS-MADI-D-01	05	90	TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.	0	03/20/2017
F-XS-MADI-D-01	06	110-130	TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	0	03/20/2017
F-XS-MADI-D-01	07	90	TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/20/2017
F-XS-MADI-D-01	08	115-130	NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	0	03/20/2017
F-XS-MADI-D-01	09	145-165	ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. BOTH SIDES	0	03/20/2017
F-XS-MADI-D-01	10	140	ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. BOTH SIDES	0	03/20/2017
F-XS-MADI-D-01	11	75	WITHIN STREAM AND SATURATED WETLAND AREAS OVER EXISTING TRANSCONTINENTAL PIPELINE	0	03/20/2017
F-XS-MADI-D-01	12	75	WITHIN SATURATED WETLAND AREAS ADJACENT TO TRANSCONTINENTAL PIPELINE	0	03/20/2017
F-XS-MADI-D-01	13		CROSS-SECTION TYPICAL MILEPOST LISTING	0	03/20/2017

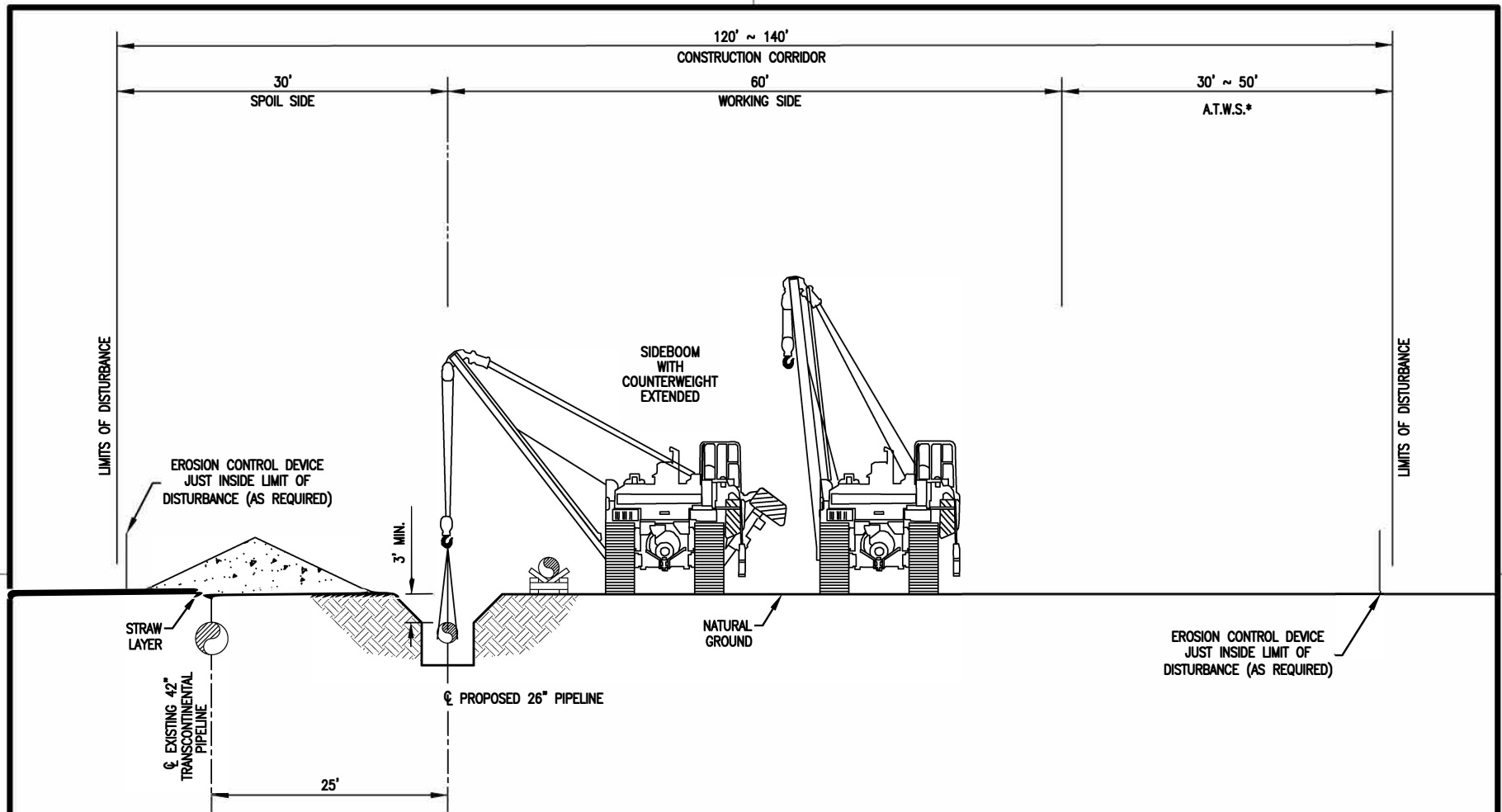


DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:	
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							JB	11/01/16		0	
							APPROVED BY:	DATE:	Figure1A-3		
							EL	11/01/16			
							WO: 1185727				



**TYPICAL CROSS SECTION FOR 26" PIPELINE
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**


DRAWING NO.		REFERENCE TITLE					TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:	
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											SHEET 03 OF 13

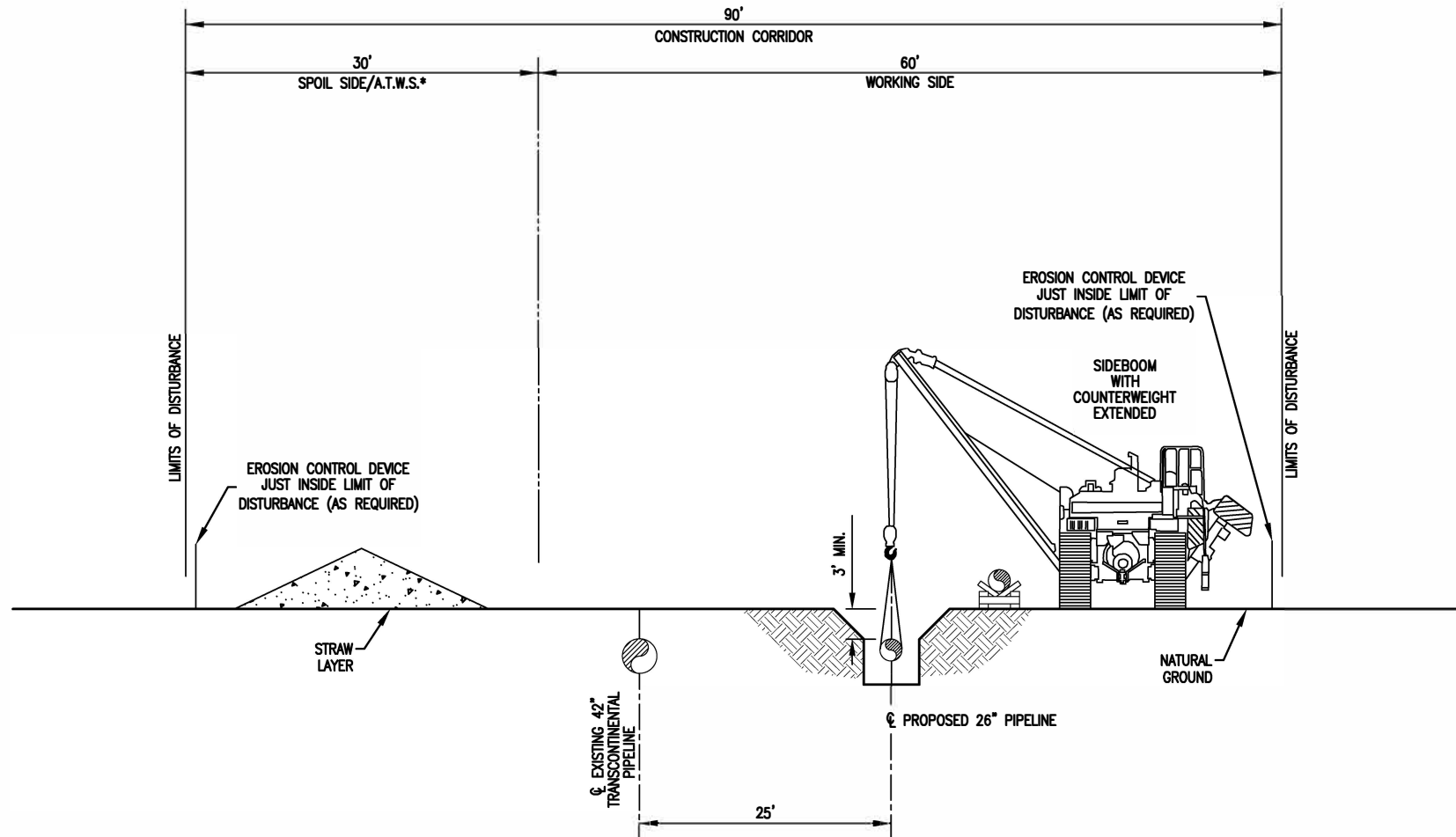


**TYPICAL CROSS SECTION FOR 26" PIPELINE
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON SOUTH SIDE**

* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.




DRAWING NO.		REFERENCE TITLE					<div>TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY</div> <div></div>			
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:
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							SHEET 04			
							OF 13			



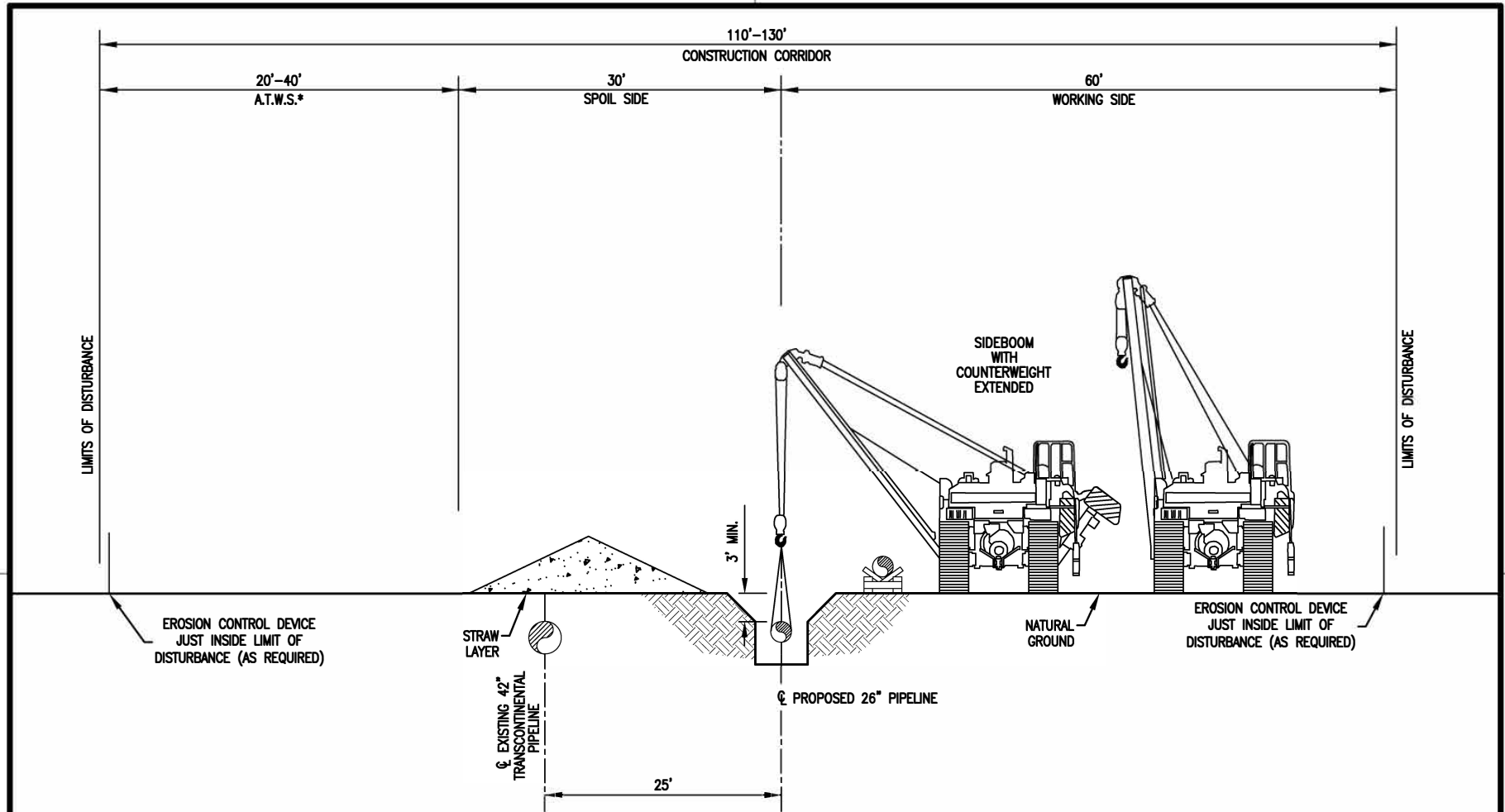
**TYPICAL CROSS SECTION FOR 26" PIPELINE
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.**

* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.

DRAWING NO.			REFERENCE TITLE				<div>TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY</div> <div></div>			
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: VC	DATE: 02/01/16	ISSUED FOR BID:	SCALE: NTS
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							APPROVED BY: EL	DATE: 11/01/16	Figure1A-3	
							WO: 1185727			
							SHEET 05 OF 13			


 **MUSTANG OF
NEW JERSEY, INC**

SHEET 05
OF 13

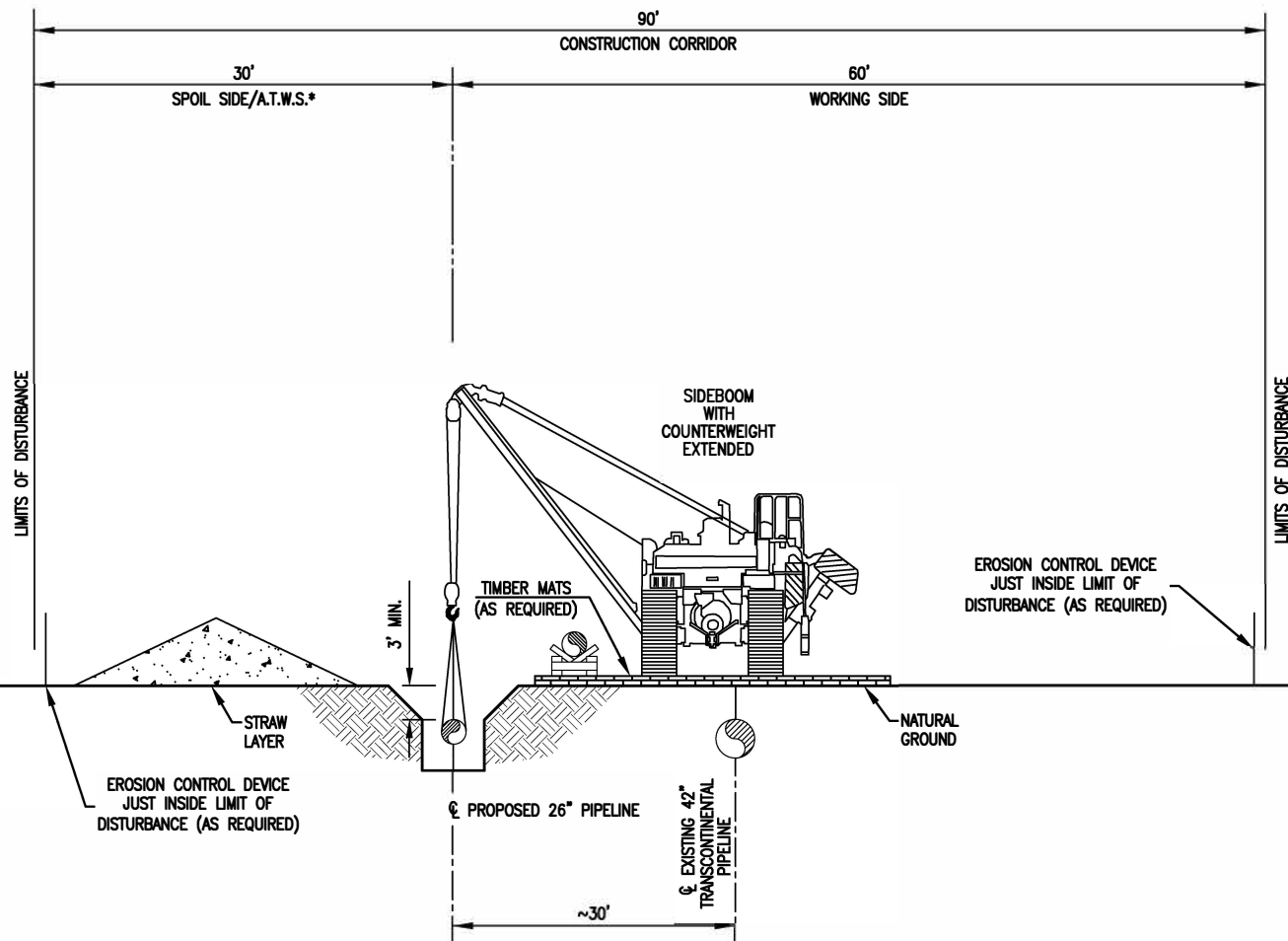


**TYPICAL CROSS SECTION FOR 26" PIPELINE
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE**

* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.


DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:
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							W.O. 1185727			
Figure1A-3									SHEET 06 OF 13	

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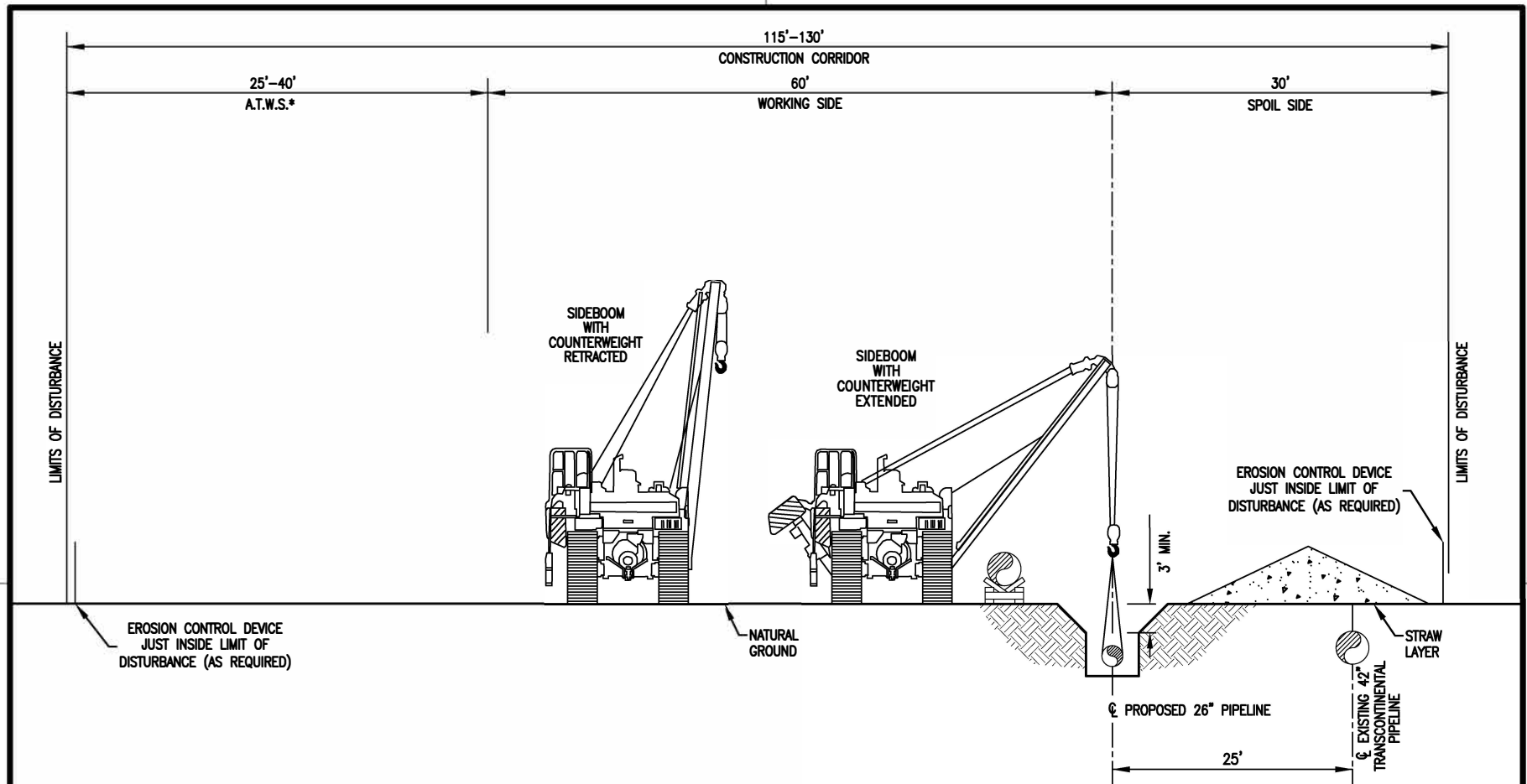
**TYPICAL CROSS SECTION FOR 26" PIPELINE
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**

* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.

DRAWING NO.			REFERENCE TITLE			
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
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			CHECKED BY: JB	DATE: 11/01/16	ISSUED FOR CONSTRUCTION:	REV: 0
			APPROVED BY: EL	DATE: 11/01/16	Figure1A-3	
			WO: 1185727			

 **MUSTANG OF
NEW JERSEY, INC**

SHEET 07
OF 13




TYPICAL CROSS SECTION FOR 26" PIPELINE
NO TOPSOIL STRIPPING – ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE

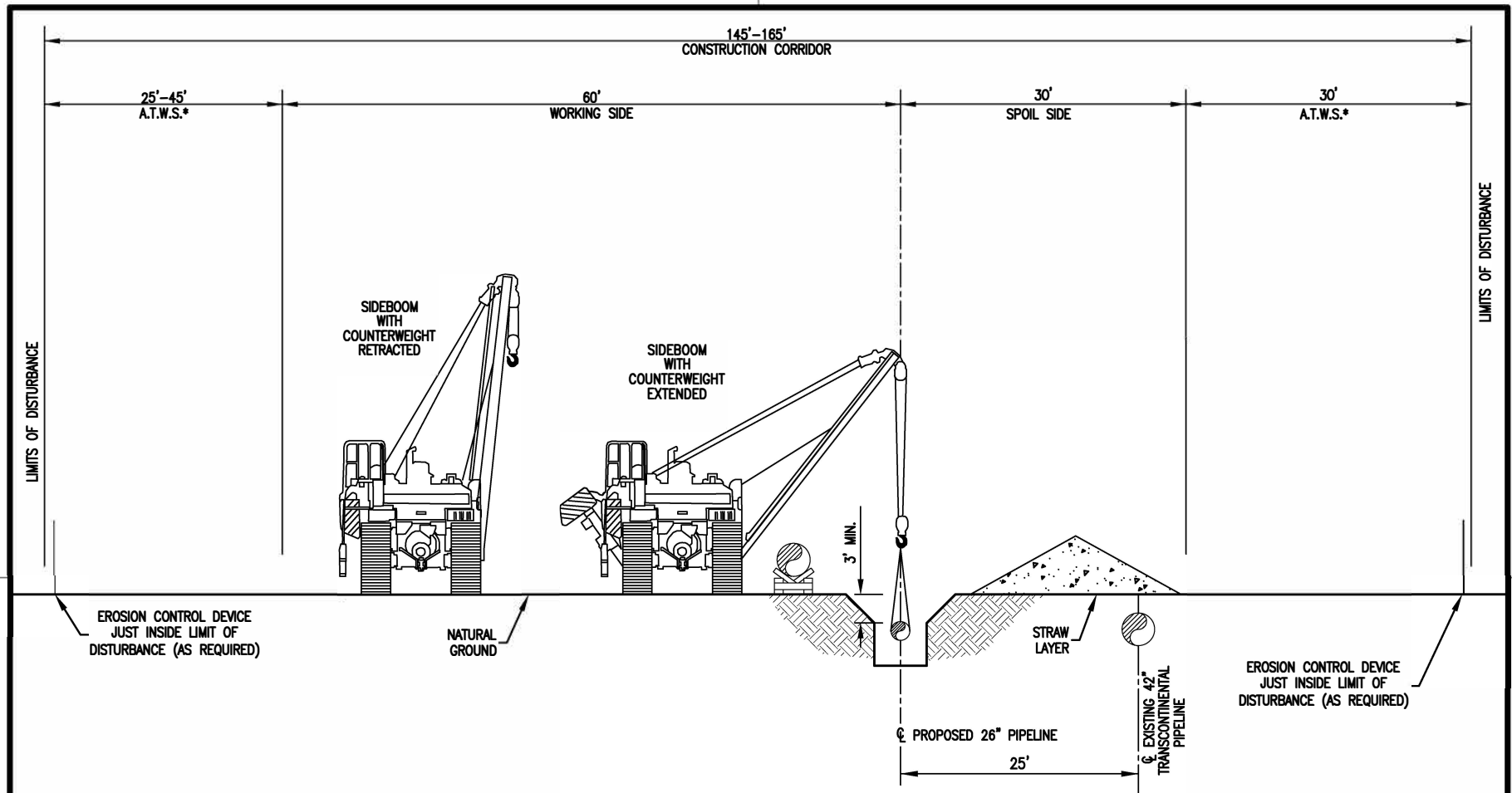
* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.



**MUSTANG OF
NEW JERSEY, INC**

DRAWING NO.		REFERENCE TITLE					TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:		
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											OF 13	


SHEET 08
OF 13

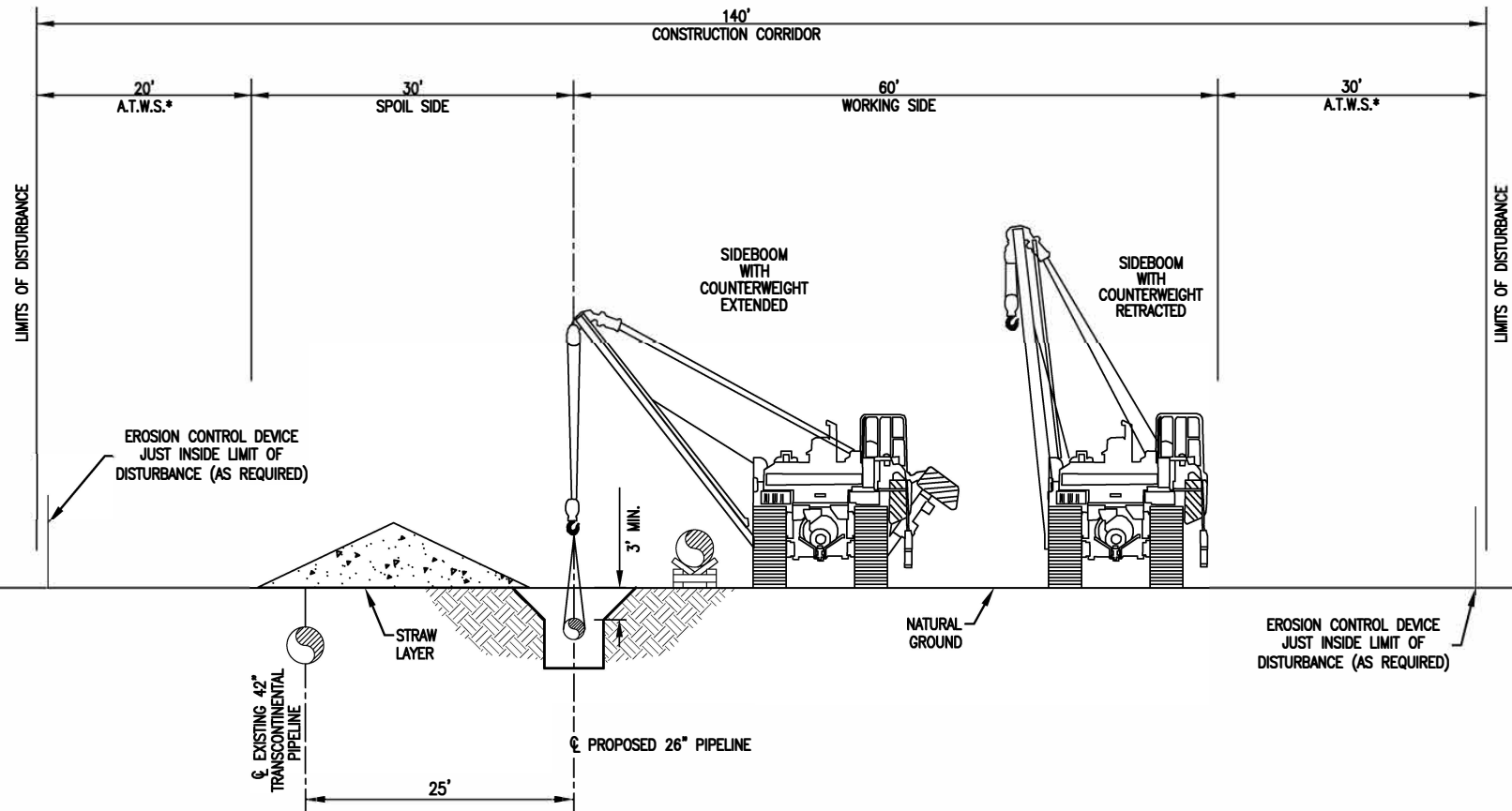


**TYPICAL CROSS SECTION FOR 26" PIPELINE
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. BOTH SIDES**

* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.




DRAWING NO.			REFERENCE TITLE				<div>TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY</div> <div></div>			
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: VC	DATE: 02/01/16	ISSUED FOR BID:	SCALE: NTS
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							WO: 1185727			
										SHEET 09 OF 13

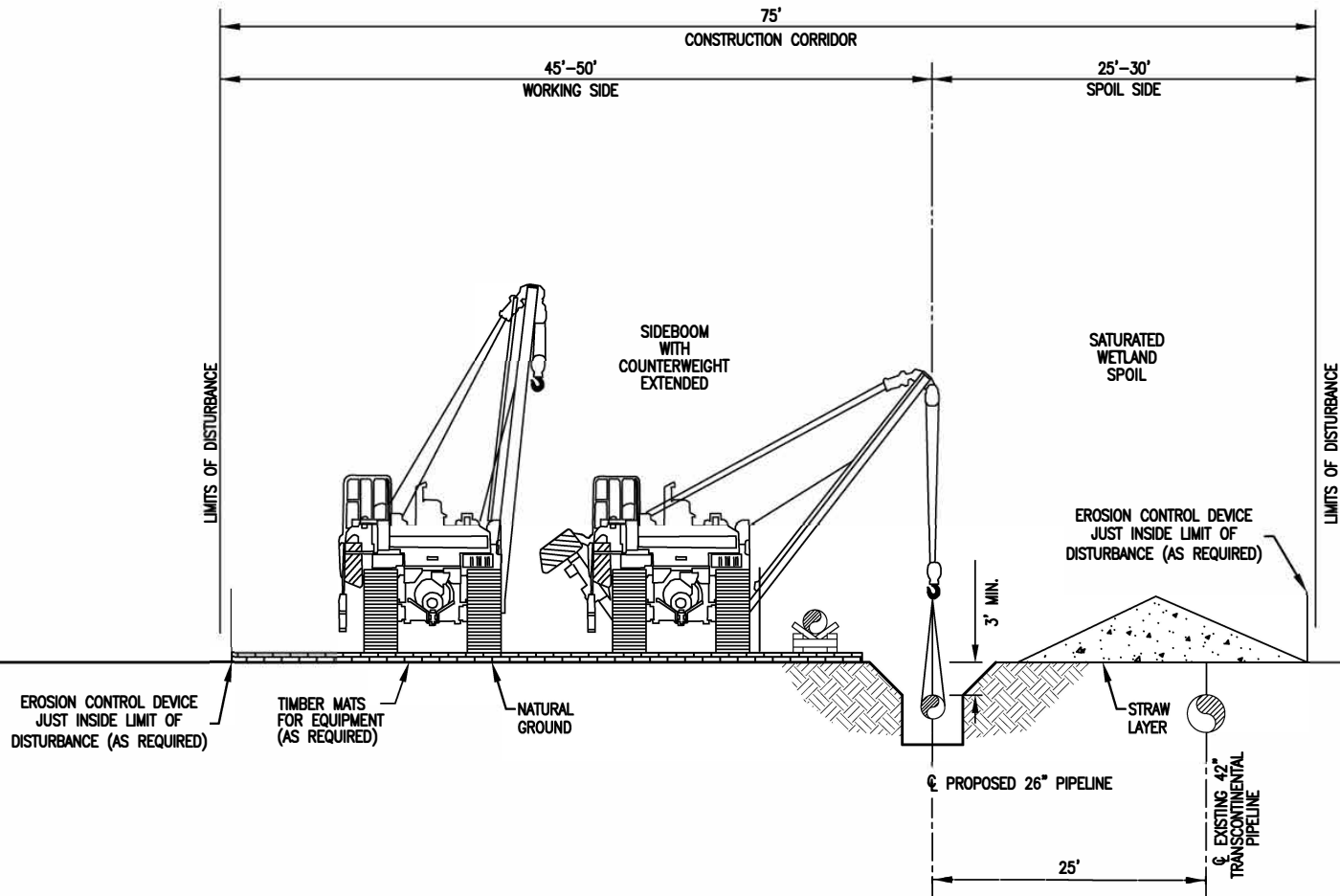


**TYPICAL CROSS SECTION FOR 26" PIPELINE
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. BOTH SIDES**


* A.T.W.S. FOR SPOILS RELATED TO: P.I., SIDE SLOPE, CROSSOVER, STREAM CROSSING, ROAD CROSSING, WETLAND CROSSING, TOPSOIL SEGREGATION, AND/OR DRAG SECTION.

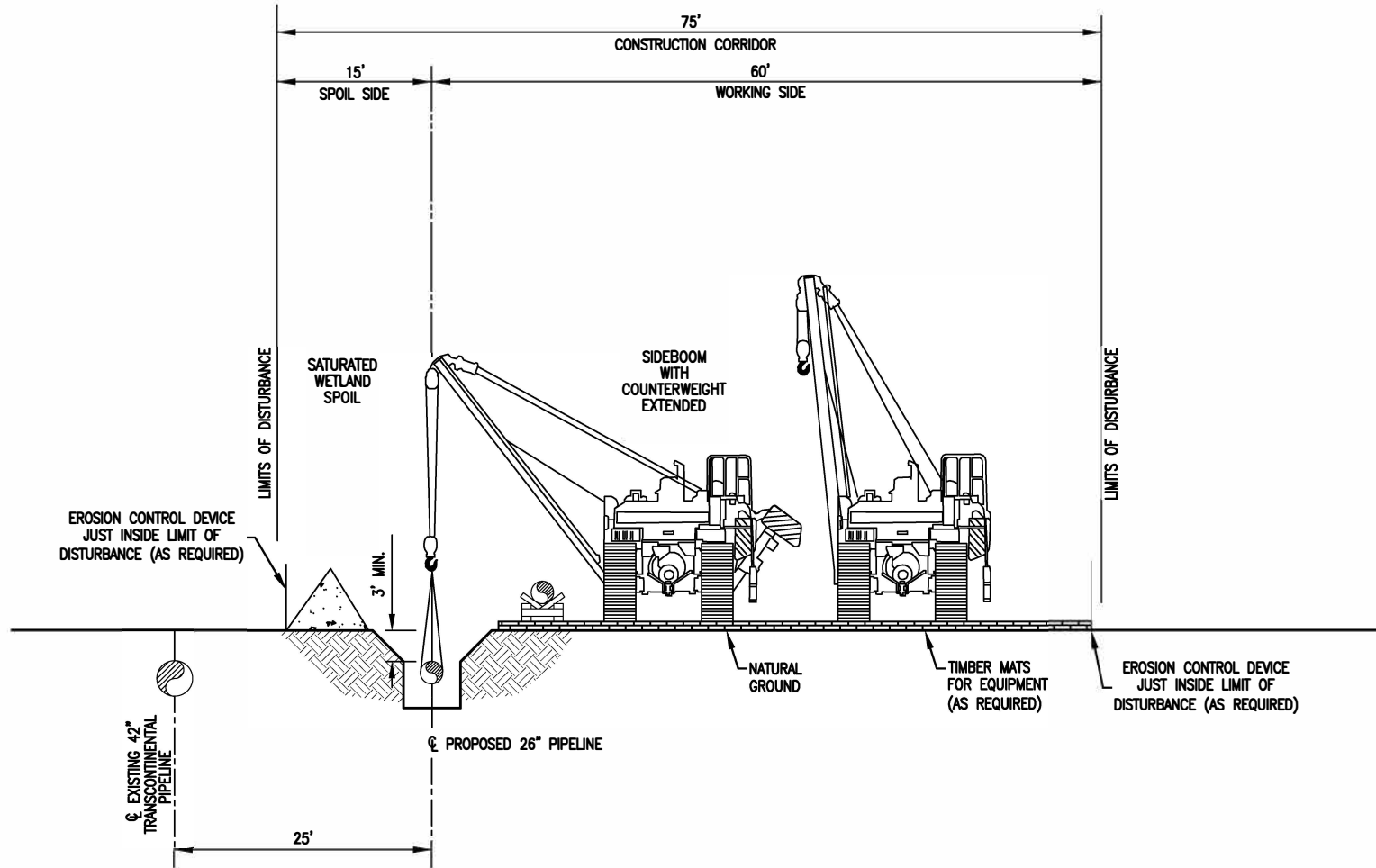
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NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:		
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							EL	11/01/16	Figure1A-3			
							1185727					
											SHEET 10	
											OF 13	

 **MUSTANG OF
NEW JERSEY, INC**




**TYPICAL CROSS SECTION FOR 26" PIPELINE
WITHIN STREAM AND SATURATED WETLAND AREAS OVER EXISTING TRANSCONTINENTAL PIPELINE**

DRAWING NO.		REFERENCE TITLE					TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:		
0	03/20/17	AT	ISSUED FOR FERC FILING	1185727	JB	EL	VC	02/01/16		NTS		
							JB	11/01/16	ISSUED FOR CONSTRUCTION:	REV: 0		
							EL	11/01/16	Figure1A-3			
							1185727					
											SHEET 11 OF 13	




**TYPICAL CROSS SECTION FOR 26" PIPELINE
WITHIN SATURATED WETLAND AREAS ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE**

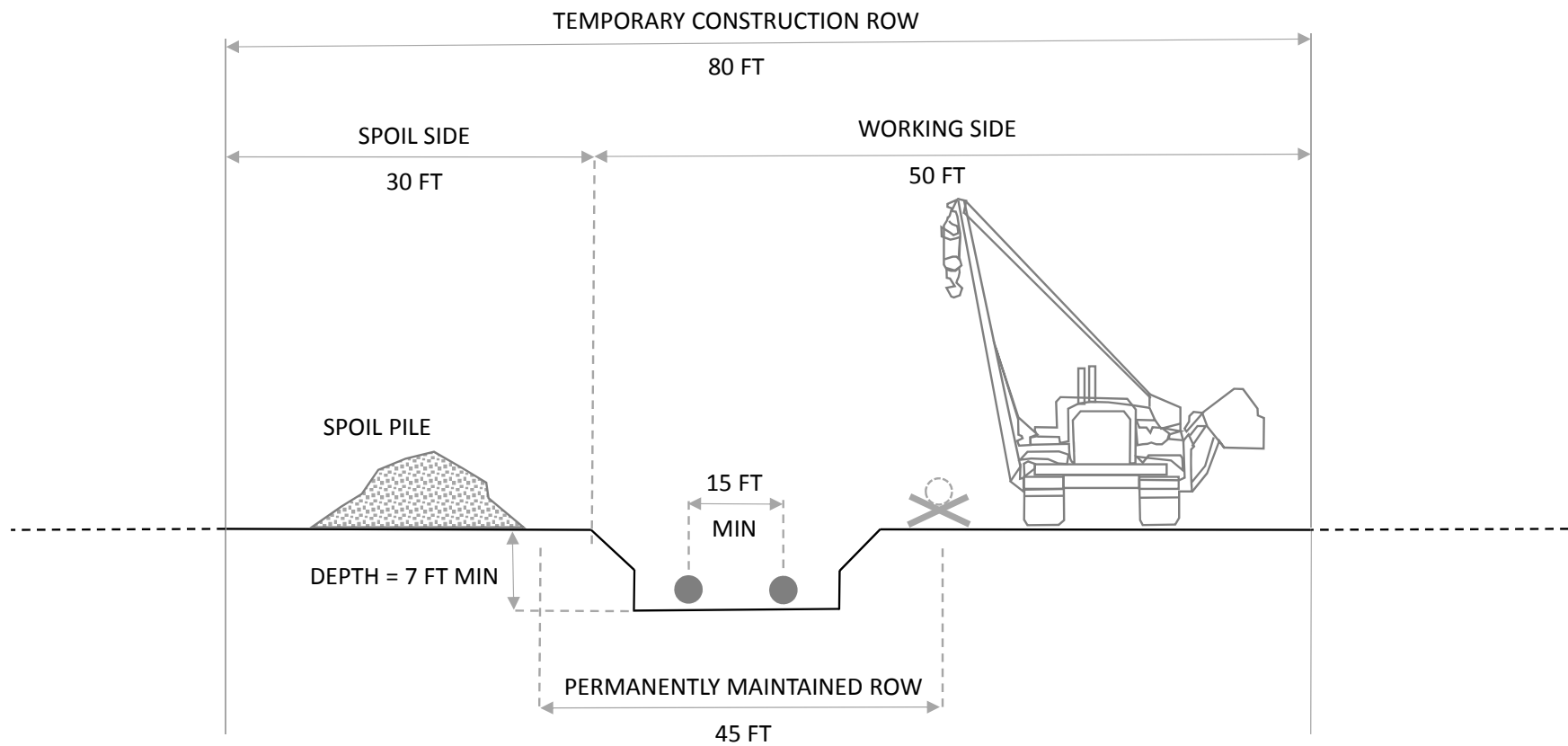
DRAWING NO.		REFERENCE TITLE					TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:		
0	03/20/17	AT	ISSUED FOR FERC FILING	1185727	JB	EL	VC	02/01/16		NTS		
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							EL	11/01/16				
							1185727		Figure1A-3			
										SHEET 12 OF 13		

CROSS SECTION TYPICAL NAME	SHEET NUMBER	BEGIN MP	END MP
WITHIN STREAM AND SATURATED WETLAND AREAS OVER EXISTING TRANSCONTINENTAL PIPELINE	11 of 13	8.60	8.63
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	8 of 13	8.65	8.73
WITHIN STREAM AND SATURATED WETLAND AREAS OVER EXISTING TRANSCONTINENTAL PIPELINE	11 of 13	8.73	8.78
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	8 of 13	8.78	8.79
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. BOTH SIDES	9 of 13	8.79	8.87
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON SOUTH SIDE	4 of 13	9.93	9.99
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 13	9.99	10.00
WITHIN STREAM AND SATURATED WETLAND AREAS OVER EXISTING TRANSCONTINENTAL PIPELINE	11 of 13	10.03	10.05
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	8 of 13	10.05	10.15
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 13	10.15	10.18
NO TOPSOIL STRIPPING - ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	8 of 13	10.18	10.27
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	6 of 13	10.43	10.46
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON SOUTH SIDE	4 of 13	10.46	10.52
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	6 of 13	10.52	10.53
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. BOTH SIDES	10 of 13	10.53	10.64
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 13	10.64	10.70
WITHIN SATURATED WETLAND AREAS ADJACENT TO TRANSCONTINENTAL PIPELINE	12 of 13	10.70	10.80
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 13	10.80	10.82
ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE A.T.W.S. BOTH SIDES	10 of 13	10.82	10.86
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON SOUTH SIDE	4 of 13	10.86	10.87
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 13	10.87	10.98
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	6 of 13	10.98	11.04
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	3 of 13	11.04	11.06
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S.	5 of 13	11.06	11.12
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	6 of 13	11.30	11.33
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE	7 of 13	11.35	11.40
TYPICAL CROSS SECTION ADJACENT TO EXISTING TRANSCONTINENTAL PIPELINE WITH A.T.W.S. ON NORTH SIDE	6 of 13	11.40	11.42

CROSS SECTION TYPICAL MILEPOST LISTING

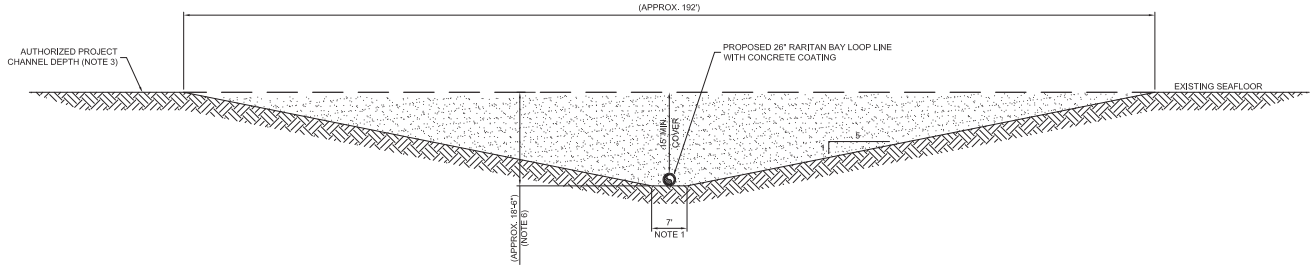
DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC TYPICAL RIGHT-OF-WAY CROSS-SECTION NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP MIDDLESEX COUNTY, NEW JERSEY					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:	
0	03/20/17	AT	ISSUED FOR FERC FILING	1185727	JB	EL	VC	03/14/17		NTS	
							CHECKED BY:	DATE:	ISSUED FOR CONSTRUCTION:	REV:	
							JB	03/14/17		0	
							APPROVED BY:	DATE:	Figure1A-3		
							EL	03/14/17			
							WO: 1185727				



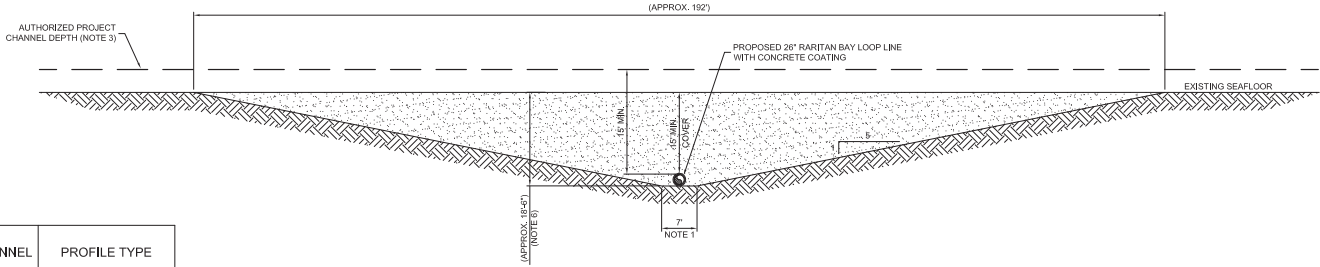


TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC
TYPICAL SUCTION/DISCHARGE HEADER
CONSTRUCTION CROSS SECTION
NORTHEAST SUPPLY ENHANCEMENT PROJECT
STATION 206
SOMERSET COUNTY, NEW JERSEY

TYPE 3C - PRE-PIPELAY TRENCHING: RARITAN BAY SHIPPING CHANNEL AT AUTHORIZED PROJECT DEPTH
15 FT MINIMUM COVER




TYPE 3D - PRE-PIPELAY TRENCHING: RARITAN BAY SHIPPING CHANNEL DEEPER THAN AUTHORIZED PROJECT DEPTH
15 FT MINIMUM COVER



MP RANGE (SEE NOTE 2)		SHIPPING CHANNEL	PROFILE TYPE
FROM	TO		
17.23	17.52	RARITAN BAY WEST REACH TRANSITION	TYPE 4 (SHEET 2 OF 3) TO TYPE 3C/D
17.52	17.68	RARITAN BAY WEST REACH	TYPE 3C/D
17.68	17.97	RARITAN BAY WEST REACH TRANSITION	TYPE 3C/D TO TYPE 4 (SHEET 2 OF 3)

- NOTES:
- TRENCH BOTTOM WIDTH WITHIN THE ROUTE CURVES TO BE INCREASED FROM 7 FT TO 10 FT.
 - MILE POST RANGES ARE APPROXIMATE.
 - ACTUAL SHIPPING CHANNEL SEABED ELEVATION MAY NOT COINCIDE WITH THE NOMINAL CHANNEL DEPTH SET BY THE US ARMY CORPS OF ENGINEERS. THE CHANNEL MAY BE DEEPER.
 - ALL UNITS ARE IN FEET UNLESS NOTED OTHERWISE.
 - "AUTHORIZED PROJECT" CHANNEL DEPTHS SET PER U.S. ARMY CORPS OF ENGINEERS.
 - TRENCH DEPTH ASSUMES 1 FT OVERDEPTH TO ENSURE MINIMUM COVERAGE REQUIREMENTS.



DRAWING NO.			REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE CORPORATION, LLC TRENCH CROSS SECTION FOR PRE AND POST PIPE LAY TRENCHING NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" RARITAN BAY LOOP LINE NEW JERSEY / NEW YORK						
F-AS-RRTN-D			FERC ALIGNMENT SHEETS										
NO.	DATE	BY	REVISION DESCRIPTION		W.O. NO.	CHK.	APP.	DRAWN BY:	DD	DATE: 10-08-2018	ISSUED FOR BID:	SCALE:	NTS
0	07-27-2018	DD	ISSUED FOR USE		1185516	GA	VN	CHECKED BY:	GA	DATE: 10-08-2018	ISSUED FOR CONSTRUCTION:	REVISION:	1
1	10-08-2018	DD	ISSUED FOR USE		1185516	GA	JV	APPROVED BY:	JV	DATE: 10-08-2018	DRAWING NUMBER:	F-XS-RRTN-D	
					W.O.: 1185516						SHEET 3 OF 3		



APPENDIX D

**ADDITIONAL TEMPORARY EXTRA WORKSPACE
ASSOCIATED WITH THE
NORTHEAST SUPPLY ENHANCEMENT PROJECT**

APPENDIX D

Additional Temporary Extra Workspace Associated with the Northeast Supply Enhancement Project ^a

State, Facility, County	ATWS ID	Approx. Milepost	Area Affected (acres)	Existing Land Use ^b	Purpose
PENNSYLVANIA					
Quarryville Loop					
Lancaster	LA-001	1681.0	0.6	I/C, OL, T, F/W	Contractor Staging Area
Lancaster	LA-001_1	1681.0	0.1	OL, F/W	Contractor Staging Area
Lancaster	LA-001_2	1681.0	0.0	AG, OL	Contractor Staging Area
Lancaster	LA-001_3	1681.0	0.2	OL, T	Contractor Staging Area
Lancaster	LA-002	1681.2	0.4	AG	Topsoil Segregation
Lancaster	LA-003	1681.3	0.4	AG, T	Drag Section/Travel Lane
Lancaster	LA-004	1681.4	0.7	AG, OL, T, F/W	Topsoil Segregation
Lancaster	LA-005	1681.4	0.2	AG, T	Staging Area
Lancaster	LA-006	1681.4	0.0	AG, T	Road Crossing
Lancaster	LA-007	1681.4	0.1	AG, T	Road Crossing
Lancaster	LA-008	1681.7	1.0	AG, F/W	Topsoil Segregation
Lancaster	LA-008_1	1681.8	0.1	AG	Stream Crossing
Lancaster	LA-008_2	1681.9	0.0	AG	Stream Crossing
Lancaster	LA-010	1681.9	0.1	AG	Topsoil Segregation
Lancaster	LA-012	1681.9	0.1	AG, T	Road Crossing
Lancaster	LA-012_1	1681.9	0.1	AG, T	Staging Area
Lancaster	LA-013	1681.9	0.1	OL, T	Road Crossing
Lancaster	LA-013_1	1681.9	0.1	OL, T	Staging Area
Lancaster	LA-014_1	1682.2	0.3	AG	Side Slope
Lancaster	LA-015	1682.4	1.3	AG, R	Topsoil Segregation
Lancaster	LA-015_1	1682.5	0.2	AG	Crossover
Lancaster	LA-015_2	1682.5	0.1	AG, T	Staging Area
Lancaster	LA-015_3	1682.5	0.0	AG, R, T	Staging Area
Lancaster	LA-016	1682.5	0.2	AG	Drag Section
Lancaster	LA-017_1	1682.7	0.1	R, T	Road Crossing
Lancaster	LA-017_2	1682.6	0.3	R, T	Drag Section
Lancaster	LA-018	1682.7	0.2	AG, T	Topsoil Segregation
Lancaster	LA-019	1682.7	0.4	AG, T	Staging Area
Lancaster	LA-020	1682.7	0.1	AG	Crossover
Lancaster	LA-021	1682.7	0.2	AG	Topsoil Segregation
Lancaster	LA-021_1	1682.7	0.2	AG	Crossover
Lancaster	LA-022	1682.8	0.2	AG, T	Staging Area
Lancaster	LA-023	1683.0	2.3	AG, OL, T, F/W	Topsoil Segregation
Lancaster	LA-024	1683.3	0.9	AG, T	Staging Area
Lancaster	LA-025	1683.3	0.2	AG, OL, T, F/W	P.I.
Lancaster	LA-026	1683.4	0.4	OL, F/W	Side Slope
Lancaster	LA-027	1683.5	0.1	OL, F/W	Stream Crossing
Lancaster	LA-028	1683.6	0.1	OL	Stream Crossing
Lancaster	LA-033	1683.5	0.1	OL, F/W	Steep Slope
Lancaster	LA-035	1683.6	0.1	OL	Side Slope
Lancaster	LA-035_1	1683.6	0.4	AG, OL	Topsoil Segregation
Lancaster	LA-036	1684.0	1.7	AG, T	Topsoil Segregation
Lancaster	LA-037	1684.1	0.3	AG	Side Slope
Lancaster	LA-038	1684.2	0.1	AG, T	Drag Section
Lancaster	LA-038_1	1684.2	0.2	AG, T	Side Slope

APPENDIX D

Additional Temporary Extra Workspace Associated with the Northeast Supply Enhancement Project ^a

State, Facility, County	ATWS ID	Approx. Milepost	Area Affected (acres)	Existing Land Use ^b	Purpose
Lancaster	LA-039	1684.3	0.1	AG	Side Slope
Lancaster	LA-039_1	1684.2	0.5	AG, T	Cathodic Protection
Lancaster	LA-039_2	1684.2	0.3	AG	Cathodic Protection
Lancaster	LA-040	1684.2	0.2	AG, T	Topsoil Segregation
Lancaster	LA-040_1	1684.5	1.7	AG, T	Topsoil Segregation
Lancaster	LA-041	1684.7	0.1	AG, T	Drag Section
Lancaster	LA-041_1	1684.8	0.1	AG, T	Road Crossing
Lancaster	LA-041_2	1684.8	0.1	AG, T	Road Crossing
Lancaster	LA-042	1684.8	0.2	AG, T	Staging Area
Lancaster	LA-043	1684.9	0.8	AG, T	Topsoil Segregation
Lancaster	LA-044	1684.8	0.4	AG	Side Slope
Lancaster	LA-045	1684.9	0.1	AG	Drag Section
Lancaster	LA-046	1685.0	0.1	AG	Topsoil Segregation
Lancaster	LA-046_1	1685.0	0.1	AG	Stream Crossing
Lancaster	LA-046_2	1685.1	0.7	AG	Topsoil Segregation
Lancaster	LA-047	1685.2	0.1	AG	Staging Area
Lancaster	LA-047_1	1685.2	0.7	AG	Hydrotest Break
Lancaster	LA-048	1685.3	0.1	AG	Road Crossing
Lancaster	LA-049	1685.3	0.1	AG, T	Road Crossing
Lancaster	LA-050	1685.3	0.1	AG, T	Staging Area
Lancaster	LA-051	1685.3	0.1	AG	Drag Section
Lancaster	LA-052	1685.4	0.8	AG, T	Topsoil Segregation
Lancaster	LA-053	1685.5	0.3	AG	Road Crossing/Staging Area
Lancaster	LA-054	1685.5	0.2	I/C	Road Crossing/Staging Area
Lancaster	LA-055	1685.5	0.1	AG, T	Staging Area
Lancaster	LA-056	1685.6	0.2	I/C	Drag Section
Lancaster	LA-057	1685.6	0.2	AG, I/C, OL	Drag Section
Lancaster	LA-057_1	1685.5	1.3	AG, I/C, T	Staging Area
Lancaster	LA-058	1685.6	0.4	AG, I/C, OL	Topsoil Segregation
Lancaster	LA-059	1685.9	0.8	AG, F/W	Topsoil Segregation
Lancaster	LA-059_1	1685.8	0.1	AG	Stream Crossing
Lancaster	LA-063_1	1686.1	10.1	AG, R, T	Contractor Staging Area
Lancaster	LA-063_2	1686.0	1.3	AG, R, T	Contractor Staging Area
Lancaster	LA-063_3	1686.1	3.0	AG, OL, R, T	Contractor Staging Area
Lancaster	LA-063_4	1686.5	0.1	OL, T, F/W	Road Crossing
Lancaster	LA-063_5	1686.5	0.1	OL	Stream Crossing
Lancaster	LA-063_6	1686.6	0.2	OL, F/W	Stream Crossing
Lancaster	LA-063_7	1686.7	0.2	OL, R, T	Road Crossing
Lancaster	LA-063_8	1686.8	3.3	AG, T, F/W	Contractor Staging Area / Crossover
Lancaster	LA-069	1687. 1	2.4	AG, T	Topsoil Segregation
Lancaster	LA-069_1	1687.4	0.1	AG	Stream Crossing
Lancaster	LA-069_2	1687.7	1.6	AG, T	Topsoil Segregation
Lancaster	LA-069_3	1687.5	0.1	AG	Stream Crossing
Lancaster	LA-069_4	1687. 8	1.2	AG, T	Valve Fabrication
Lancaster	LA-070	1687.9	0.0	AG, T	Road Crossing
Lancaster	LA-071	1687.9	0.0	AG, T	Road Crossing

APPENDIX D

Additional Temporary Extra Workspace Associated with the Northeast Supply Enhancement Project ^a

State, Facility, County	ATWS ID	Approx. Milepost	Area Affected (acres)	Existing Land Use ^b	Purpose
Lancaster	LA-072	1687.9	0.2	AG, T	Staging Area
Lancaster	LA-073	1687.9	0.2	AG, T	Staging Area
Lancaster	LA-074	1688.0	0.6	AG, T	Topsoil Segregation
Lancaster	LA-074_1	1688.3	1.0	AG	Topsoil Segregation
Lancaster	LA-074_2	1688.1	0.1	AG	Wetland Crossing
Lancaster	LA-074_3	1688.2	0.1	AG	Wetland Crossing
Lancaster	LA-075	1688.4	0.1	AG	Topsoil Segregation
Lancaster	LA-075_1	1688.4	0.0	AG	Stream Crossing
Lancaster	LA-076	1688.6	0.2	AG, T	Topsoil Segregation
Lancaster	LA-077	1688.6	0.2	AG, T	Staging Area
Lancaster	LA-078	1688.6	0.7	AG, T	Staging Area
Lancaster	LA-079	1688.6	0.4	AG, T	Topsoil Segregation
Lancaster	LA-079_1	1688.6	0.0	AG, T	Road Crossing
Lancaster	LA-079_2	1688.6	0.0	AG, T	Road Crossing
Lancaster	LA-080	1688.8	0.2	AG	Topsoil Segregation
Lancaster	LA-080_1	1688.8	0.1	AG	Wetland Crossing
Lancaster	LA-081	1688.9	0.7	AG	Topsoil Segregation
Lancaster	LA-082	1688.9	0.3	AG	Side Slope
Lancaster	LA-083	1689.1	0.5	AG	Topsoil Segregation
Lancaster	LA-084	1689.2	0.2	AG	Drag Section
Lancaster	LA-085	1689.2	0.2	AG	Topsoil Segregation
Lancaster	LA-086	1689.3	0.6	AG, OL, T	Topsoil Segregation
Lancaster	LA-087	1689.4	0.2	AG, T	Staging Area
Lancaster	LA-088	1689.3	0.0	AG	Stream Crossing
Lancaster	LA-089	1689.4	0.3	AG, I/C, OL, T	Road Crossing
Lancaster	LA-090	1689.4	0.2	AG, I/C, OL, R	Equipment Travel Lane
Lancaster	LA-091	1689.4	0.4	AG, OL, T	Topsoil Segregation
Lancaster	LA-093	1689.6	0.7	AG, T	Topsoil Segregation
Lancaster	LA-093_1	1689.5	0.1	AG	Drag Section
Lancaster	LA-094	1689.7	0.1	AG, T	Drag Section
Lancaster	LA-095	1689.8	0.7	AG, T	Topsoil Segregation
Lancaster	LA-096	1689.8	0.3	AG	Side Slope
Lancaster	LA-097	1689.9	0.2	AG, T	Staging Area/Drag Section
Lancaster	LA-097_1	1689.9	0.0	AG	Road Crossing
Lancaster	LA-097_2	1689.9	0.0	AG, T	Road Crossing
Lancaster	LA-098	1690.1	1.5	AG, OL, T	Topsoil Segregation
Lancaster	LA-099	1690.2	0.5	AG, OL, T	Side Slope
Lancaster	LA-100	1690.4	0.1	AG, T	Staging Area
Lancaster	LA-101	1690.4	0.2	AG, T, F/W	Topsoil Segregation
Lancaster	LA-102	1690.4	0.0	AG, T	Road Crossing
Lancaster	LA-103	1690.5	0.0	AG, T	Road Crossing
Lancaster	LA-104	1690.5	0.2	AG, T	Staging Area/Drag Section
Lancaster	LA-105	1690.5	0.2	AG, T	Topsoil Segregation
Lancaster	LA-106	1690.6	0.1	AG	Topsoil Segregation
Lancaster	LA-106_1	1690.6	0.1	AG	Stream Crossing
Lancaster	LA-106_2	1690.6	0.1	AG, OL	Topsoil Segregation
Lancaster	LA-107	1690.8	0.7	AG	Topsoil Segregation

APPENDIX D

Additional Temporary Extra Workspace Associated with the Northeast Supply Enhancement Project ^a

State, Facility, County	ATWS ID	Approx. Milepost	Area Affected (acres)	Existing Land Use ^b	Purpose
Lancaster	LA-107_1	1690.8	0.2	AG	Drag Section
Lancaster	LA-108	1690.9	0.1	AG	Wetland Crossing
Lancaster	LA-109	1691.1	0.8	AG, T	Topsoil Segregation
Lancaster	LA-109_1	1691.0	0.1	AG	Wetland Crossing
Lancaster	LA-109_2	1691.1	0.2	AG	Drag Section
Lancaster	LA-110	1691.1	0.3	AG, T	Staging Area
Lancaster	LA-111	1691.1	0.1	AG, T	Road Crossing
Lancaster	LA-112	1691.2	0.5	AG, I/C, OL, T	Contractor Staging Area
Lancaster	LA-112_1	1691.2	0.1	AG, I/C, OL, T	Contractor Staging Area
Quarryville Loop Subtotal			65.0		
NEW JERSEY					
Madison Loop					
Middlesex	MID-001	8.6	0.5	I/C, OL, T, F/W	Fabrication/Spoil Storage
Middlesex	MID-001_1	8.6	0.1	I/C, OL	Fabrication/Spoil Storage
Middlesex	MID-002	8.6	0.0	OL	Creek Spoil
Middlesex	MID-003	8.6	0.1	F/W	Drag Section
Middlesex	MID-004	8.7	0.1	F/W	P.I.
Middlesex	MID-005	8.7	0.1	F/W	Side Slope
Middlesex	MID-006	8.9	0.3	F/W	Side Slope
Middlesex	MID-006_1	8.9	0.0	OL	HDD
Middlesex	MID-006_2	8.8	2.0	I/C, OL, OW, F/W, W	HDD
Middlesex	MID-009_1	8.8	0.4	OL	Side Slope
Middlesex	MID-013	9.2	0.7	OL, OW, F/W, W	HDD
Middlesex	MID-013_1	9.3	0.0	OL, F/W	HDD
Middlesex	MID-013_3	9.3	0.6	OL, F/W	HDD
Middlesex	MID-013_4	9.4	0.2	OL, F/W	P.I.
Middlesex	MID-014_1	9.4	0.4	OL, F/W	HDD
Middlesex	MID-014_2	9.4	0.1	F/W	HDD
Middlesex	MID-019	9.5	0.1	OL, F/W	Access/Staging Area
Middlesex	MID-020	9.5	0.3	OL	Access/Staging Area
Middlesex	MID-022	9.9	0.4	OL	HDD
Middlesex	MID-023	9.9	0.2	OL, F/W	HDD
Middlesex	MID-025	10.0	0.1	OL, F/W	Drag Section
Middlesex	MID-026	10.0	0.1	F/W	Side Slope
Middlesex	MID-027	10.0	0.2	OL, F/W	Side Slope
Middlesex	MID-028	10.0	0.1	OL, F/W	Stream Crossing
Middlesex	MID-029	10.0	0.1	OL, F/W	Drag Section
Middlesex	MID-030	10.0	0.0	OL	P.I.
Middlesex	MID-031	10.1	0.2	F/W	Drag Section
Middlesex	MID-032	10.1	0.3	OL, F/W	Side Slope
Middlesex	MID-033	10.2	0.1	I/C, OL	Drag Section
Middlesex	MID-034	10.2	0.2	OL	Side Slope
Middlesex	MID-035	10.3	0.2	OL	P.I.
Middlesex	MID-035_1	10.3	0.0	OL	
Middlesex	MID-036	10.4	0.3	OL, T	Staging Area
Middlesex	MID-038	10.4	0.2	OL	P.I.

APPENDIX D

Additional Temporary Extra Workspace Associated with the Northeast Supply Enhancement Project ^a

State, Facility, County	ATWS ID	Approx. Milepost	Area Affected (acres)	Existing Land Use ^b	Purpose
Middlesex	MID-039	10.5	0.2	F/W	Drag Section
Middlesex	MID-040	10.5	0.1	F/W	P.I.
Middlesex	MID-041	10.6	0.3	OL, F/W	Side Slope
Middlesex	MID-042	10.6	0.3	OL	Side Slope
Middlesex	MID-043	10.8	0.2	OL, F/W	Side Slope
Middlesex	MID-044	10.8	0.1	OL	Slide Slope
Middlesex	MID-044_1	11.0	0.1	OL	Road Crossing (Future)
Middlesex	MID-044_2	11.0	0.1	OL, R	Road Crossing (Future)
Middlesex	MID-046	11.1	0.2	OL	Staging Area
Middlesex	MID-046_1	11.1	0.1	OL	Road Crossing (Future)
Middlesex	MID-047	11.2	0.2	OL	Road Crossing
Middlesex	MID-048	11.3	1.0	OL, R, W	Road Crossing
Middlesex	MID-049	11.3	0.3	OL	Staging Area
Middlesex	MID-050_1	11.4	0.1	W	Road Crossing
Middlesex	MID-051	11.5	0.5	OL, W	HDD
Middlesex	MID-052	11.5	0.0	W	HDD
Middlesex	MID-053	11.8	0.1	OL, R	HDD
Middlesex	MID-054	11.8	0.3	OL, W	HDD
Middlesex	MID-054_1	11.8	0.3	I/C, OL, OW, W	Hydrotest Water Withdrawal and Discharge
Middlesex	MID-055	11.9	0.7	OL, R	HDD
Middlesex	MID-056	11.9	0.1	OL, R	HDD
Middlesex	MID-056_1	11.9	0.1	R	HDD
Madison Loop Subtotal			14.0		
Raritan Bay Loop					
Middlesex	ATWS-RBL-002	12.0	0.4	OL, T	HDD
Middlesex	ATWS-RBL-003	12.1	0.5	I/C, OL	HDD
Middlesex	ATWS-RBL-004	12.1	0.0	OL	Cathodic Protection
Middlesex	ATWS-RBL-005 ^c	12.1	0.2	OL, T	Cathodic Protection
Raritan Bay Loop New Jersey Subtotal			1.1		
New York					
Raritan Bay Loop					
Queens	ATWS-RBL-008	27.0 – 29.7	349.8	OW	HDD Pipe String
Raritan Bay Loop New York Subtotal			349.8		
Project Total			429.9		

^a Rows shown in bold lettering indicate additional temporary workspace (ATWS) that is located within 50 feet of a wetland or waterbody (see table 2.3-2).

^b ID Key: AG = Agricultural Land; I/C = Industrial/Commercial Land; OL = Open Land; OW = Open Water; R = Residential; T = Transportation Land; F/W = Upland Forest/Woodland; W = Wetland.

^c Includes onshore and offshore workspaces associated with this ATWS.

APPENDIX E

PROJECT-SPECIFIC UPLAND EROSION CONTROL, REVEGETATION, AND MAINTENANCE PLAN



TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

APPENDIX 1B TO RESOURCE REPORT 1

GENERAL PROJECT DESCRIPTION

ATTACHMENT 1

**PROJECT-SPECIFIC UPLAND EROSION CONTROL,
REVEGETATION, AND MAINTENANCE PLAN**

NORTHEAST SUPPLY ENHANCEMENT PROJECT

MARCH 2017

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LIST OF ABBREVIATIONS AND ACRONYMS

ATWS	additional temporary work space
Director	Director of the Office of Energy Projects
FERC	Federal Energy Regulatory Commission
Project	Northeast Supply Enhancement Project
Secretary	Secretary of FERC
Transco	Transcontinental Gas Pipe Line Company
Transco Procedures	Project-specific Wetland and Waterbody Construction and Mitigation Procedures

I. APPLICABILITY

- A. The intent of this Plan is to identify baseline mitigation measures for minimizing erosion and enhancing revegetation for the onshore portion of Transcontinental Gas Pipe Line Company, LLC (Transco) Northeast Supply Enhancement Project (Project). Transco will specify in its application for a new Federal Energy Regulatory Commission (FERC) authorization and in prior notice and advance notice filings, any individual measures in this Plan it considers unnecessary, technically infeasible, or unsuitable due to local conditions and fully describe any alternative measures they would use. Transco will also explain how those alternative measures would achieve a comparable level of mitigation. Deviations from the FERC Plan proposed by Transco to reflect site-specific conditions are **bolded** in the text.

Once the Project is authorized, Transco will request further changes as variances to the measures in the Transco Plan. The Director of the Office of Energy Projects (Director) will consider approval of variances upon Transco's written request if the Director agrees that a variance:

1. provides equal or better environmental protection;
2. is necessary because a portion of this Plan is infeasible or unworkable based on project-specific conditions; or
3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the Project on its land or under its jurisdiction.

Project-related impacts on wetland and waterbody systems are addressed in the Transco Project-specific Wetland and Waterbody Construction and Mitigation Procedures (Transco Procedures [see Attachment 2 of Appendix 1B to RR 1]).

II. SUPERVISION AND INSPECTION

A. ENVIRONMENTAL INSPECTION

1. At least one Environmental Inspector is required for each construction spread during construction and restoration (as defined by section V). The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.
2. Environmental Inspectors shall have peer status with all other activity inspectors.
3. Environmental Inspectors shall have the authority to stop activities that violate the environmental conditions of the FERC's Orders, stipulations of other environmental permits or approvals, or landowner easement agreements and to order appropriate corrective action.

B. RESPONSIBILITIES OF ENVIRONMENTAL INSPECTORS

At a minimum, the Environmental Inspector(s) shall be responsible for:

1. Inspecting construction activities for compliance with the requirements of the Transco Plan, Transco Procedures, the environmental conditions of the FERC's Orders, the mitigation measures (as approved and/or modified by the Order), other environmental permits and approvals, and environmental requirements in landowner easement agreements;
2. Identifying, documenting, and overseeing corrective actions, as necessary to bring an activity back into compliance;
3. Verifying that the limits of authorized construction work areas and locations of access roads are visibly marked before clearing and maintained throughout construction;
4. Verifying the location of signs and highly visible flagging marking the boundaries of sensitive resource areas, waterbodies, wetlands, or areas with special requirements along the construction work area;
5. Identifying erosion/sediment control and soil stabilization needs in all areas;
6. Ensuring that the design of slope breakers will not cause erosion or direct water into sensitive environmental resource areas, including cultural resource sites, wetlands, waterbodies, and sensitive species habitats;
7. Verifying that dewatering activities are properly monitored and do not result in the deposition of sand, silt, and/or sediment into sensitive environmental resource areas, including wetlands, waterbodies, cultural resource sites, and sensitive species habitats; stopping dewatering activities if such deposition is occurring and ensuring the design of the discharge is changed to prevent recurrence; and verifying that dewatering structures are removed after completion of dewatering activities;
8. Ensuring that subsoil and topsoil are tested in agricultural and residential areas to measure compaction and determine the need for corrective action;
9. Advising the Chief Construction Inspector when environmental conditions (such as wet weather or frozen soils) make it advisable to restrict or delay construction activities to avoid topsoil mixing or excessive compaction;
10. Ensuring restoration of contours and topsoil;
11. Verifying that the soils imported for agricultural or residential use are certified as free of noxious weeds and soil pests, unless otherwise approved by the landowner;
12. Ensuring that erosion control devices are properly installed to prevent sediment flow into sensitive environmental resource areas (e.g., wetlands, waterbodies, cultural resource sites, and sensitive species habitats) and onto roads and determining the need for additional erosion control devices;

13. Inspecting and ensuring the maintenance of temporary erosion control measures at least:
 - a. on a daily basis in areas of active construction or equipment operation;
 - b. on a weekly basis in areas with no construction or equipment operation; and
 - c. within 24 hours of each 0.5 inch of rainfall.
14. Ensuring the repair of all ineffective temporary erosion control measures within 24 hours of identification or as soon as conditions allow if compliance with this time frame would result in greater environmental impacts;
15. Keeping records of compliance with the environmental conditions of the FERC's Orders and the mitigation measures in the Transco application submitted to the FERC and other federal or state environmental permits during active construction and restoration;
16. Identifying areas that should be given special attention to ensure stabilization and restoration after the construction phase; and
17. Verifying that locations for any disposal of excess construction materials for beneficial reuse comply with section III.E.

III. PRECONSTRUCTION PLANNING

Transco will do the following before construction:

A. CONSTRUCTION WORK AREAS

1. Identify all construction work areas (e.g., construction right-of-way, extra work space areas, additional temporary workspaces (ATWS) areas, pipe storage and contractor yards, borrow and disposal areas, access roads) that would be needed for safe construction. Transco will ensure that appropriate cultural resources and biological surveys are conducted as determined necessary by the appropriate federal and state agencies.
2. Expand any required cultural resources and endangered species surveys in anticipation of the need for activities outside of authorized work areas.
3. Plan construction sequencing to limit the amount and duration of open trench sections, as necessary, to prevent excessive erosion or sediment flow into sensitive environmental resource areas.

B. DRAIN TILE AND IRRIGATION SYSTEMS

1. Attempt to locate existing drain tiles and irrigation systems.
2. Contact landowners and local soil conservation authorities to determine the locations of future drain tiles that are likely to be installed within three years of the authorized construction.
3. Develop procedures for constructing through drain-tiled areas, maintaining irrigation systems during construction, and repairing drain tiles and irrigation systems after construction.
4. Engage qualified drain tile specialists, as needed, to conduct or monitor repairs to drain tile systems affected by construction. Use drain tile specialists from the Project area, if available.

C. GRAZING DEFERMENT

Develop grazing deferment plans with willing landowners, grazing permittees, and land management agencies to minimize grazing disturbance of revegetation efforts.

D. ROAD CROSSINGS AND ACCESS POINTS

Plan for safe and accessible conditions at all roadway crossings and access points during construction and restoration.

E. DISPOSAL PLANNING

Determine methods and locations for the regular collection, containment, and disposal of excess construction materials and debris (e.g., timber, slash, mats, garbage, drill cuttings and fluids, excess rock) throughout the construction process. Disposal of materials for beneficial reuse must not result in adverse environmental impact and is subject to compliance with all applicable survey, landowner or land management agency approval, and permit requirements.

F. AGENCY COORDINATION

Transco will coordinate with the appropriate local, state, and federal agencies as outlined in this Plan and/or required by the FERC's Orders.

1. Obtain written recommendations from the local soil conservation authorities or land management agencies regarding permanent erosion control and revegetation specifications.
2. Develop specific procedures in coordination with the appropriate agencies to prevent the introduction or spread of invasive species, noxious weeds, and soil pests resulting from construction and restoration activities. Refer to the Transco

Project-specific Noxious and Invasive Weed Control Plan (see Attachment 10 in Appendix 1B to RR 1).

3. Develop specific procedures in coordination with the appropriate agencies and landowners, as necessary, to allow for livestock and wildlife movement and protection during construction.
4. Develop specific blasting procedures in coordination with the appropriate agencies that address pre- and post-blast inspections; advanced public notification; and mitigation measures for building foundations, groundwater wells, and springs. Use appropriate methods (e.g., blasting mats) to prevent damage to nearby structures and to prevent debris from entering sensitive environmental resource areas.

G. SPILL PREVENTION AND RESPONSE PROCEDURES

Transco will develop project-specific Spill Prevention and Response Procedures, as specified in section IV of the staff's Procedures. A copy will be filed with the Secretary of FERC (Secretary) prior to construction and made available in the field on each construction spread. Refer to the Transco Project-specific Spill Plan for Oil and Hazardous Materials (see Attachment 9 to Appendix 1B).

H. RESIDENTIAL CONSTRUCTION

For all properties with residences located within 50 feet of construction work areas, Transco will avoid removal of mature trees and landscaping within the construction work area unless necessary for safe operation of construction equipment or as specified in landowner agreements, fence the edge of the construction work area for a distance of 100 feet on either side of the residence, and restore all lawn areas and landscaping immediately following clean-up operations or as specified in landowner agreements. If seasonal or other weather conditions prevent compliance with these time frames, maintain and monitor temporary erosion controls (sediment barriers and mulch) until conditions allow completion of restoration.

I. WINTER CONSTRUCTION PLANS

Transco has filed a Project-specific Winter Construction Plan with the FERC application (see Attachment 11 to Appendix 1B).

The plan addresses:

1. winter construction procedures (e.g., snow handling and removal, access road construction and maintenance, soil handling under saturated or frozen conditions, topsoil stripping);
2. stabilization and monitoring procedures if ground conditions will delay restoration until the following spring (e.g., mulching and erosion controls, inspection and reporting, storm water control during spring thaw conditions); and

3. final restoration procedures (e.g., subsidence and compaction repair, topsoil replacement, seeding).

IV. **INSTALLATION**

A. APPROVED AREAS OF DISTURBANCE

1. Project-related ground disturbance will be limited to the construction right-of-way, extra work space areas, ATWS areas, pipe storage yards, borrow and disposal areas, access roads, and other areas approved in the FERC's Orders. Any Project-related ground-disturbing activities outside these areas will require prior Director approval. This requirement does not apply to activities needed to comply with the Plan and Procedures (i.e., slope breakers, energy-dissipating devices, dewatering structures, drain tile system repairs) or minor field realignments and workspace shifts per landowner needs and requirements that do not affect other landowners or sensitive environmental resource areas. All construction or restoration activities outside of authorized areas are subject to all applicable survey and permit requirements and landowner easement agreements.
2. The Transco construction rights-of-way widths in upland locations for this Project will include:
 - a. 90 feet for the Madison Loop
 - b. 100 feet for the Quarryville Loop

Transco will provide extra work spaces and ATWS areas outside of the construction rights-of-way for full construction right-of-way topsoil segregation and to ensure safe construction where required by topographic conditions (e.g., side-slopes) or soil limitations. Extra work space and ATWS areas may also be used in limited, non-wetland or non-forested areas for truck turn-arounds where no reasonable alternative access exists.

Project use of extra work space and ATWS areas outside of authorized work areas is subject to landowner or land management agency approval and compliance with all applicable survey and permit requirements. However, in limited, non-wetland areas, the construction right-of-way width may be expanded by up to 25 feet without Director approval to accommodate full construction right-of-way topsoil segregation and to ensure safe construction where topographic conditions (e.g., side-slopes) or soil limitations require it. Twenty-five feet of extra construction right-of-way width may also be used in limited, non-wetland or non-forested areas for truck turn-arounds where no reasonable alternative access exists. Project use of these additional limited areas is subject to landowner or land management agency approval and compliance with all applicable survey and permit requirements. When additional areas are used, each one shall be identified and the need explained in the weekly or biweekly construction reports to FERC, if required. The following materials will be included in the reports:

- a. the location of each additional area by milepost or station number and reference to previously filed alignment sheets or updated alignment sheets showing the additional areas;
- b. identification of the filing at FERC containing evidence that the additional areas were previously surveyed; and
- c. a statement that landowner approval has been obtained and is available in Project files.

B. TOPSOIL SEGREGATION

1. Unless the landowner or land management agency specifically approves otherwise, Transco will prevent the mixing of topsoil with subsoil by stripping topsoil from either the full work area or from the trench and subsoil storage area (ditch plus spoil side method) in:
 - a. cultivated or rotated croplands, and managed pastures;
 - b. residential areas;
 - c. hayfields; and
 - d. other areas at the landowner's or land managing agency's request.
2. In residential areas, importation of topsoil is an acceptable alternative to topsoil segregation.
3. Where topsoil segregation is required:
 - a. segregate at least 12 inches of topsoil in deep soils (more than 12 inches of topsoil); and
 - b. make every effort to segregate the entire topsoil layer in soils with less than 12 inches of topsoil.
4. Maintain separation of salvaged topsoil and subsoil throughout all construction activities.
5. Segregated topsoil may not be used for padding the pipe, constructing temporary slope breakers or trench plugs, improving or maintaining roads, or as a fill material.
6. Stabilize topsoil piles and minimize loss due to wind and water erosion with use of sediment barriers, mulch, temporary seeding, tackifiers, or functional equivalents, where necessary.

C. DRAIN TILES

1. Mark locations of drain tiles damaged during construction.
2. Probe all drainage tile systems within the area of disturbance to check for damage.

3. Repair damaged drain tiles to their original or better condition. Do not use filter-covered drain tiles unless the local soil conservation authorities and the landowner agree. Use qualified specialists for testing and repairs.
4. For new pipelines in areas where drain tiles exist or are planned, ensure that the depth of cover over the pipeline is sufficient to avoid interference with drain tile systems. For adjacent pipeline loops in agricultural areas, install the new pipeline with at least the same depth of cover as the existing pipeline(s).

D. IRRIGATION

Maintain water flow in crop irrigation systems unless shutoff is coordinated with affected parties.

E. ROAD CROSSINGS AND ACCESS POINTS

1. Maintain safe and accessible conditions at all road crossings and access points during construction. Refer to the Transco Project-specific Traffic and Transportation Management Plan. *(The Traffic and Transportation Management Plan will be submitted in a supplemental filing, in the 2nd quarter of 2017.)*
2. If crushed stone access pads are used in residential or agricultural areas, place the stone on synthetic fabric to facilitate removal.
3. Minimize the use of tracked equipment on public roadways. Remove any soil or gravel spilled or tracked onto roadways daily or more frequent as necessary to maintain safe road conditions. Repair any damages to roadway surfaces, shoulders, and bar ditches.

F. TEMPORARY EROSION CONTROL

Install temporary erosion controls immediately after initial disturbance of the soil. Temporary erosion controls must be properly maintained throughout construction (on a daily basis) and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration is complete.

1. Temporary Slope Breakers
 - a. Temporary slope breakers are intended to reduce runoff velocity and divert water off the construction right-of-way. Temporary slope breakers may be constructed of materials such as soil, silt fence, staked hay or straw bales, or sand bags.
 - b. Install temporary slope breakers on all disturbed areas, as necessary, to avoid excessive erosion. Temporary slope breakers must be installed on slopes greater than 5 percent where the base of the slope is less than 50 feet from waterbody, wetland, and road crossings at the following spacing (closer spacing shall be used if necessary):

<u>Slope (%)</u>	<u>Spacing (feet)</u>
5 - 15	300
>15 - 30	200
>30	100

- c. Direct the outfall of each temporary slope breaker to a stable, well-vegetated area or construct an energy-dissipating device at the end of the slope breaker and off the construction right-of-way.
- d. Position the outfall of each temporary slope breaker to prevent sediment discharge into wetlands, waterbodies, or other sensitive environmental resource areas.

2. Temporary Trench Plugs

Temporary trench plugs are intended to segment a continuous open trench prior to backfill.

- a. Temporary trench plugs may consist of unexcavated portions of the trench, compacted subsoil, sandbags, or some functional equivalent.
- b. Position temporary trench plugs, as necessary, to reduce trenchline erosion and minimize the volume and velocity of trench water flow at the base of slopes.

3. Sediment Barriers

Sediment barriers are intended to stop the flow of sediments and to prevent the deposition of sediments beyond approved workspaces or into sensitive resources.

- a. Sediment barriers may be constructed of materials such as silt fence, staked hay or straw bales, compacted earth (e.g., driveable berms across travelways), sand bags, or other appropriate materials.
- b. At a minimum, install and maintain temporary sediment barriers across the entire construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody, wetland, or road crossing until revegetation is successful as defined in this Plan. Leave adequate room between the base of the slope and the sediment barrier to accommodate ponding of water and sediment deposition.
- c. Where wetlands or waterbodies are adjacent to and downslope of construction work areas, install sediment barriers along the edge of these areas, as necessary, to prevent sediment flow into the wetland or waterbody.

4. Mulch

- a. Apply mulch on all slopes (except in cultivated cropland) concurrent with or immediately after seeding where necessary to stabilize the soil surface and

to reduce wind and water erosion. Spread mulch uniformly over the area to cover at least 75 percent of the ground surface at a rate of 2 tons/acre of straw or its equivalent unless the local soil conservation authority, landowner, or land managing agency approves otherwise in writing.

- b. Mulch can consist of weed-free straw or hay, wood fiber hydromulch, erosion-control fabric, or some functional equivalent.
- c. Mulch all disturbed upland areas (except cultivated cropland) before seeding if:
 - (1) final grading and installation of permanent erosion control measures will not be completed in an area within 20 days after the trench in that area is backfilled (10 days in residential areas), as required in section V.A.1; or
 - (2) construction or restoration activity is interrupted for extended periods, such as when seeding cannot be completed due to seeding period restrictions.
- d. If mulching before seeding, increase mulch application on all slopes within 100 feet of waterbodies and wetlands to a rate of 3 tons/acre of straw or equivalent.
- e. If wood chips are used as mulch, do not use more than 1 ton/acre and add the equivalent of 11 lbs/acre available nitrogen (at least 50 percent of which is slow release).
- f. Ensure that mulch is adequately anchored to minimize loss due to wind and water.
- g. When anchoring with liquid mulch binders, use rates recommended by the manufacturer. Do not use liquid mulch binders within 100 feet of wetlands or waterbodies, except where the product is certified environmentally non-toxic by the appropriate state or federal agency or independent standards-setting organization.
- h. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.

V. RESTORATION

A. CLEANUP

- 1. Commence cleanup operations immediately following backfill operations. Complete final grading, topsoil replacement, and installation of permanent erosion control structures within 20 days after backfilling the trench (10 days in residential areas). If seasonal or other weather conditions prevent compliance with these time

frames, maintain temporary erosion controls (i.e., temporary slope breakers, sediment barriers, and mulch) until conditions allow completion of cleanup.

Transco will file with the Secretary for the review and written approval of the Director a Winter Construction Plan (as specified in section III.I). Refer to the Transco Project-specific Winter Construction Plan (see Attachment 11 to Appendix 1B).

2. A travel lane may be left open temporarily to allow access by construction traffic if the temporary erosion control structures are installed as specified in section IV.F and inspected and maintained as specified in sections II.B.12 through 14. When access is no longer required the travel lane must be removed and the right-of-way restored.
3. Rock excavated from the trench may be used to backfill the trench only to the top of the existing bedrock profile. Rock that is not returned to the trench shall be considered construction debris unless approved for use as mulch or for some other use on the construction work areas by the landowner or land management agency.
4. Remove excess rock from at least the top 12 inches of soil in all cultivated or rotated cropland, managed pastures, hayfields, and residential areas, as well as other areas at the landowner's request. The size, density, and distribution of rock on the construction work area shall be similar to adjacent areas not disturbed by construction. The landowner or land management agency may approve other provisions in writing.
5. Grade the construction right-of-way to restore pre-construction contours and leave the soil in the proper condition for planting.
6. Remove construction debris from all construction work areas unless the landowner or land management agency approves leaving materials on-site for beneficial reuse, stabilization, or habitat restoration.
7. Remove temporary sediment barriers when replaced by permanent erosion control measures or when revegetation is successful.

B. PERMANENT EROSION CONTROL DEVICES

1. Trench Breakers
 - a. Trench breakers are intended to slow the flow of subsurface water along the trench. Trench breakers may be constructed of materials such as sand bags or polyurethane foam. Do not use topsoil in trench breakers.
 - b. An engineer or similarly qualified professional shall determine the need for and spacing of trench breakers. Otherwise, trench breakers shall be installed at the same spacing and upslope of permanent slope breakers.
 - c. In agricultural fields and residential areas where slope breakers are not typically required, install trench breakers at the same spacing as if permanent slope breakers were required.

- d. At a minimum, install a trench breaker at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from a waterbody or wetland and where needed to avoid draining a waterbody or wetland. Install trench breakers at wetland boundaries, as specified in the Transco Procedures.

2. Permanent Slope Breakers

- a. Permanent slope breakers are intended to reduce runoff velocity, divert water off the construction right-of-way, and prevent sediment deposition into sensitive resources. Permanent slope breakers may be constructed of materials such as soil, stone, or some functional equivalent.
- b. Construct and maintain permanent slope breakers in all areas, except cultivated areas and lawns, unless requested by the landowner, using spacing recommendations obtained from the local soil conservation authority or land-management agency.

In the absence of written recommendations, use the following spacing unless closer spacing is necessary to avoid excessive erosion on the construction right-of-way:

<u>Slope (%)</u>	<u>Spacing (feet)</u>
5 - 15	300
>15 - 30	200
>30	100

- c. Construct slope breakers to divert surface flow to a stable area without causing water to pool or erode behind the breaker. In the absence of a stable area, construct appropriate energy-dissipating devices at the end of the breaker.
- d. Slope breakers may extend slightly (about 4 feet) beyond the edge of the construction right-of-way to effectively drain water off the disturbed area. Slope breakers that extend beyond the edge of the construction right-of-way they are subject to compliance with all applicable survey requirements.

C. SOIL COMPACTION MITIGATION

1. Test topsoil and subsoil for compaction at regular intervals in agricultural and residential areas disturbed by construction activities. Conduct tests on the same soil type under similar moisture conditions in undisturbed areas to approximate preconstruction conditions. Use penetrometers or other appropriate devices to conduct tests.
2. Plow severely compacted agricultural areas with a paraplow or other deep tillage implement. In areas where topsoil has been segregated, plow the subsoil before replacing the segregated topsoil. If subsequent construction and cleanup activities result in further compaction, conduct additional tilling. Refer to the Transco Project-

specific Agricultural Construction and Monitoring Plan (see Attachment 7 in Appendix 1B to RR 1).

3. Perform appropriate soil compaction mitigation in severely compacted residential areas.

D. REVEGETATION

1. General

- a. Transco will ensure successful revegetation of soils disturbed by Project-related activities, except as noted in section V.D.1.b below.
- b. Restore all turf, ornamental shrubs, and specialized landscaping in accordance with the landowner's request or compensate the landowner. Restoration work must be performed by personnel familiar with local horticultural and turf-establishment practices.

2. Soil Additives

Fertilize and add soil pH modifiers in accordance with written recommendations obtained from the local soil conservation authority, land management agencies, or landowner. Incorporate recommended soil pH modifier and fertilizer into the top 2 inches of soil as soon as practicable after application.

3. Seeding Requirements

- a. Prepare a seedbed in disturbed areas to a depth of 3 to 4 inches using appropriate equipment to provide a firm seedbed. When hydroseeding, scarify the seedbed to facilitate lodging and germination of seed.
- b. Seed disturbed areas in accordance with written recommendations for seed mixes, rates, and dates obtained from the local soil conservation authority or at the request of the landowner or land management agency. Seeding is not required in cultivated croplands unless requested by the landowner.
- c. Perform seeding of permanent vegetation within the recommended seeding dates. If seeding cannot be done within those dates, use appropriate temporary erosion control measures discussed in section IV.F and perform seeding of permanent vegetation at the beginning of the next recommended seeding season. Dormant seeding or temporary seeding of annual species may also be used, if necessary, to establish cover, as approved by the Environmental Inspector. Lawns may be seeded on a schedule established with the landowner.
- d. In the absence of written recommendations from the local soil conservation authorities, seed all disturbed soils within six working days of final grading, weather and soil conditions permitting, subject to the specifications in section V.D.3.a through V.D.3.c above.

- e. Base seeding rates on pure live seed. Use seed within 12 months of seed testing.
- f. Treat legume seed with an inoculant specific to the species using the manufacturer's recommended rate of inoculant appropriate for the seeding method (broadcast, drill, or hydro).
- g. In the absence of written recommendations from the local soil conservation authorities, landowner, or land management agency to the contrary, a seed drill equipped with a cultipacker is preferred for seed application.

Broadcast or hydroseeding can be used in lieu of drilling at double the recommended seeding rates. Where seed is broadcast, firm the seedbed with a cultipacker or roller after seeding. In rocky soils or where site conditions may limit the effectiveness of this equipment, other alternatives may be appropriate (e.g., use of a chain drag) to lightly cover seed after application, as approved by the Environmental Inspector.

VI. OFF-ROAD VEHICLE CONTROL

To each owner or manager of forested lands, offer to install and maintain measures to control unauthorized vehicle access to the right-of-way. These measures may include:

- 1. signs;
- 2. fences with locking gates;
- 3. slash and timber barriers, pipe barriers, or a line of boulders across the right-of-way; and
- 4. conifers or other appropriate trees or shrubs across the right-of-way.

VII. POST-CONSTRUCTION ACTIVITIES AND REPORTING

A. MONITORING AND MAINTENANCE

- 1. Conduct follow-up inspections of all disturbed areas, as necessary, to determine the success of revegetation and address landowner concerns. At a minimum, conduct inspections after the first and second growing seasons.
- 2. Revegetation in non-agricultural areas shall be considered successful if upon visual survey the density and cover of non-nuisance vegetation are similar in density and cover to adjacent undisturbed lands. In agricultural areas, revegetation shall be considered successful when, upon visual survey, crop growth and vigor are similar to adjacent undisturbed portions of the same field, unless the easement agreement specifies otherwise.
- 3. Continue revegetation efforts until revegetation is successful.

4. Monitor and correct problems with drainage and irrigation systems resulting from pipeline construction in agricultural areas until restoration is successful.
5. Restoration will be considered successful when the right-of-way surface condition is similar to adjacent undisturbed lands, construction debris is removed (unless otherwise approved by the landowner or land management agency per section V.A.6), revegetation is successful, and proper drainage has been restored.
6. Routine vegetation mowing or clearing over the full width of the permanent right-of-way in uplands will not be done more frequently than every three years. However, to facilitate periodic corrosion/leak surveys, a corridor not exceeding 10 feet in width centered on the pipeline may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In no case will routine vegetation mowing or clearing occur during the migratory bird nesting season between April 1 and August 31 of any year unless specifically approved in writing by the responsible land management agency or the U.S. Fish and Wildlife Service.
7. Efforts to control unauthorized off-road vehicle use, in cooperation with the landowner, shall continue throughout the life of the Project. Maintain signs, gates, and permanent access roads as necessary.

B. REPORTING

1. Transco will maintain records that identify by milepost:
 - a. method of application, application rate, and type of fertilizer, pH modifying agent, seed, and mulch used;
 - b. acreage treated;
 - c. dates of backfilling and seeding;
 - d. names of landowners requesting special seeding treatment and a description of the follow-up actions;
 - e. the location of any subsurface drainage repairs or improvements made during restoration; and
 - f. any problem areas and how they were addressed.
2. Transco will file with the Secretary quarterly activity reports documenting the results of follow-up inspections required by section VII.A.1; any problem areas, including those identified by the landowner; and corrective actions taken for at least two years following construction.

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APPENDIX F

PROJECT-SPECIFIC WETLAND AND WATERBODY CONSTRUCTION AND MITIGATION PROCEDURES



TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC

APPENDIX 1B TO RESOURCE REPORT 1

GENERAL PROJECT DESCRIPTION

ATTACHMENT 2

**PROJECT-SPECIFIC WETLAND AND WATERBODY CONSTRUCTION AND
MITIGATION PROCEDURES**

NORTHEAST SUPPLY ENHANCEMENT PROJECT

MARCH 2017

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LIST OF ABBREVIATIONS AND ACRONYMS

ATWS	additional temporary workspace
Director	Director of the Office of Energy Projects
FERC	Federal Energy Regulatory Commission
HDD	horizontal directional drill
NPDES	National Pollutant Discharge Elimination System
NWI	National Wetland Inventory
Secretary	Secretary of FERC
Transco Plan	Project-specific Upland Erosion Control, Revegetation, and Maintenance Plan
USACE	U.S. Army Corps of Engineers

I. APPLICABILITY

- A. The intent of these Procedures is to identify baseline mitigation measures for minimizing the extent and duration of the Transcontinental Gas Pipe Line Company, LLC (Transco) Northeast Supply Enhancement Project (Project)-related disturbance on wetlands and waterbodies and to limit adverse impacts on aquatic habitats and water quality downstream of waterbody crossings. Transco will specify in its applications for a new Federal Energy Regulatory Commission (FERC) authorization and in prior notice and advance notice filings any individual measures in these Procedures it considers unnecessary, technically infeasible, or unsuitable due to local conditions and will fully describe any alternative measures Transco would use. Transco will also explain how those alternative measures will achieve a comparable level of mitigation. Deviations from the FERC Procedures proposed by Transco to reflect site-specific conditions are **bolded** in the text.

Once the Project is authorized, Transco may request further changes as variances to the measures in the Transco Procedures. The Director of the Office of Energy Projects (Director) will consider approval of variances upon Transco's written request if the Director agrees that a variance:

1. provides equal or better environmental protection;
2. is necessary because a portion of these Procedures is infeasible or unworkable based on Project-specific conditions; or
3. is specifically required in writing by another federal, state, or Native American land management agency for the portion of the Project on its land or under its jurisdiction.

Project-related impacts on non-wetland areas are addressed in the Transco Project-specific Upland Erosion Control, Revegetation, and Maintenance Plan (Transco Plan [Attachment 1 in Appendix 1B to RR 1]).

B. DEFINITIONS

1. "Waterbody" includes any natural or artificial stream, river, or drainage with perceptible flow at the time of crossing and other permanent waterbodies such as ponds and lakes:
 - a. "minor waterbody" includes all waterbodies less than or equal to 10 feet wide at the water's edge at the time of crossing;
 - b. "intermediate waterbody" includes all waterbodies greater than 10 feet wide but less than or equal to 100 feet wide at the water's edge at the time of crossing; and
 - c. "major waterbody" includes all waterbodies greater than 100 feet wide at the water's edge at the time of crossing.

2. "Wetland" includes any area that is not in actively cultivated or rotated cropland and that satisfies the requirements of the current federal methodology for identifying and delineating wetlands.

II. PRECONSTRUCTION FILING

- A. The following information will be filed with the Secretary of the FERC (Secretary) prior to the beginning of construction for the review and written approval by the Director:
 1. site-specific justifications for additional temporary workspace (ATWS) areas that would be closer than 50 feet from a waterbody or wetland; and
 2. site-specific justifications for the use of a construction right-of-way greater than 75-feet-wide in wetlands.
- B. The following information will be filed with the Secretary prior to the beginning of construction:
 1. Spill Prevention and Response Procedures specified in Section IV.A;
 2. a schedule identifying when trenching or blasting will occur within each waterbody greater than 10 feet wide, within any designated cold water fishery, and within any waterbody identified as habitat for federally listed threatened or endangered species. Transco will revise the schedule as necessary to provide FERC staff at least 14 days advance notice. Changes within this last 14-day period must provide for at least 48 hours advance notice;
 3. plans for horizontal directional drills (HDD) under wetlands or waterbodies, specified in Section V.B.6.d;
 4. site-specific plans for major waterbody crossings, described in Section V.B.9;
 5. a wetland delineation report as described in Section VI.A.1, and
 6. the hydrostatic testing information specified in Section VII.B.3.

III. ENVIRONMENTAL INSPECTORS

- A. At least one Environmental Inspector having knowledge of the wetland and waterbody conditions in the Project area is required for each construction spread. The number and experience of Environmental Inspectors assigned to each construction spread shall be appropriate for the length of the construction spread and the number/significance of resources affected.
- B. The Environmental Inspector's responsibilities are outlined in the Transco Plan.

IV. PRECONSTRUCTION PLANNING

- A. Transco will develop a Project-specific Spill Prevention and Response Procedures that meet applicable requirements of state and federal agencies. A copy will be filed with the

Secretary prior to construction and made available in the field on each construction spread. Refer to the Spill Plan for Oil and Hazardous Materials (see Attachment 9 to Appendix 1B).

1. Transco and its contractors will structure their operations in a manner that reduces the risk of spills or the accidental exposure of fuels or hazardous materials to waterbodies or wetlands. Transco and its contractors must, at a minimum, ensure that:
 - a. all employees handling fuels and other hazardous materials are properly trained;
 - b. all equipment is in good operating order and inspected on a regular basis;
 - c. fuel trucks transporting fuel to on-site equipment travel only on approved access roads;
 - d. all equipment is parked overnight and/or fueled at least 100 feet from a waterbody or in an upland area at least 100 feet from a wetland boundary;
 - e. hazardous materials, including chemicals, fuels, and lubricating oils, are not stored within 100 feet of a wetland, waterbody, or designated municipal watershed area unless the location is designated for such use by an appropriate governmental authority. This applies to storage of these materials and does not apply to normal operation or use of equipment in these areas;
 - f. concrete coating activities are not performed within 100 feet of a wetland or waterbody boundary unless the location is an existing industrial site designated for such use. These activities can occur closer only if the Environmental Inspector determines that there is no reasonable alternative, and the Project sponsor and its contractors have taken appropriate steps (including secondary containment structures) to prevent spills and provide for prompt cleanup in the event of a spill;
 - g. pumps operating within 100 feet of a waterbody or wetland boundary utilize appropriate secondary containment systems to prevent spills; and
 - h. bulk storage of hazardous materials, including chemicals, fuels, and lubricating oils have appropriate secondary containment systems to prevent spills.
2. Transco and its contractors will structure their operations in a manner that provides for the prompt and effective cleanup of spills of fuel and other hazardous materials. At a minimum, Transco and its contractors will:
 - a. ensure that each construction crew (including clean-up crews) has on hand sufficient supplies of absorbent and barrier materials to allow the rapid containment and recovery of spilled materials and knows the procedure for reporting spills and unanticipated discoveries of contamination;

- b. ensure that each construction crew has on hand sufficient tools and material to stop leaks;
- c. know the contact names and telephone numbers for all local, state, and federal agencies (including, if necessary, the U.S. Coast Guard and the National Response Center) that must be notified of a spill; and
- d. follow the requirements of those agencies in cleaning up the spill, in excavating and disposing of soils or other materials contaminated by a spill, and in collecting and disposing of waste generated during spill cleanup.

B. AGENCY COORDINATION

Transco will coordinate with the appropriate local, state, and federal agencies as outlined in these Procedures and in the FERC's Orders.

V. **WATERBODY CROSSINGS**

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply to the U.S. Army Corps of Engineers (USACE), or its delegated agency, for the appropriate wetland and waterbody crossing permits.
2. Provide written notification to authorities responsible for potable surface water supply intakes located within 3 miles downstream of the crossing at least one week before beginning work in the waterbody or as otherwise specified by that authority.
3. Apply for state-issued waterbody crossing permits and obtain individual or generic Section 401 water quality certification or waiver.
4. Notify appropriate federal and state authorities at least 48 hours before beginning trenching or blasting within the waterbody or as specified in applicable permits.

B. INSTALLATION

1. Time Window for Construction

As permitted by state agencies, in-stream work, except that required to install or remove equipment bridges, will occur during the following time windows:

- a. Cold water fisheries – June 1 through September 30; and
- b. Cool water and warm water fisheries – June 1 through November 30.

2. Extra Work Areas

- a. Locate all extra work areas (such as staging areas) and ATWS areas (such as spoil storage areas and full right-of-way topsoil) at least 50 feet away

from the water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.

- b. Transco will file with the Secretary for review and written approval by the Director, site-specific justification for each ATWS area with a less than 50-foot setback from the water's edge, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.
- c. Limit the size of ATWS areas to the minimum needed to construct the waterbody crossing.

3. General Crossing Procedures

- a. Comply with the USACE's, or its delegated agency's, permit terms and conditions.
- b. Construct crossings as close to perpendicular to the axis of the waterbody channel as engineering and routing conditions permit.
- c. Where pipelines parallel a waterbody, maintain at least 15 feet of undisturbed vegetation between the waterbody (and any adjacent wetland) and the construction right-of-way, except where maintaining this offset will result in greater environmental impact.

Where pipelines parallel a waterbody and Transco is unable to maintain at least 15 feet of undisturbed vegetation between the waterbody (and any adjacent wetland) and the construction ROW, Transco will file with the Secretary for review and written approval by the Director, site-specific justification.

- d. Where waterbodies meander or have multiple channels, route the pipeline to minimize the number of waterbody crossings.
- e. Maintain adequate waterbody flow rates to protect aquatic life and prevent the interruption of existing downstream uses.
- f. Waterbody buffers (e.g., extra work area setbacks, refueling restrictions) must be clearly marked in the field with signs and/or highly visible flagging until construction-related ground-disturbing activities are complete.
- g. Crossing of waterbodies when they are dry or frozen and not flowing may proceed using standard upland construction techniques in accordance with the Transco Plan, provided that the Environmental Inspector verifies that water is unlikely to flow between initial disturbance and final stabilization of the feature. In the event of perceptible flow, the Project sponsor must comply with all applicable Procedure requirements for "waterbodies" as defined in Section I.B.1.

4. Spoil Pile Placement and Control

- a. All spoil from minor and intermediate waterbody crossings and upland spoil from major waterbody crossings must be placed in the construction right-of-way at least 10 feet from the water's edge or in ATWS areas as described in Section V.B.2.
- b. Use sediment barriers to prevent the flow of spoil or silt-laden water into any waterbody.

5. Equipment Bridges

- a. Only clearing equipment and equipment necessary for installation of equipment bridges may cross waterbodies prior to bridge installation. Limit the number of such crossings of each waterbody to one per piece of clearing equipment.
- b. Construct and maintain equipment bridges to allow unrestricted flow and to prevent soil from entering the waterbody. Examples of such bridges include:
 - (1) equipment pads and culvert(s);
 - (2) equipment pads or railroad car bridges without culverts;
 - (3) clean rock fill and culvert(s); and
 - (4) flexi-float or portable bridges.

Additional options for equipment bridges may be utilized that achieve the performance objectives noted above. Do not use soil to construct or stabilize equipment bridges.

- c. Design and maintain each equipment bridge to withstand and pass the highest flow expected to occur while the bridge is in place. Align culverts to prevent bank erosion or streambed scour. If necessary, install energy dissipating devices downstream of the culverts.
- d. Design and maintain equipment bridges to prevent soil from entering the waterbody.
- e. Remove temporary equipment bridges as soon as practicable after permanent seeding.
- f. If there will be more than one month between final cleanup and the beginning of permanent seeding and reasonable alternative access to the right-of-way is available, remove temporary equipment bridges as soon as practicable after final cleanup.

- g. Obtain any necessary approval from the USACE or the appropriate state agency for permanent bridges.

6. Dry-Ditch Crossing Methods

- a. Unless approved otherwise by the appropriate federal or state agency, install the pipeline using one of the dry-ditch methods outlined below for crossing waterbodies up to 30 feet wide (at the water's edge at the time of construction) that are state-designated as either cold water or significant cool water or warm water fisheries or are federally designated as critical habitat.

- b. Dam and Pump

- (1) The dam-and-pump method may be used without prior approval for crossings of waterbodies where pumps can adequately transfer streamflow volumes around the work area and there are no concerns about sensitive species passage.
 - (2) Implementation of the dam-and-pump crossing method must meet the following performance criteria:
 - (a) use sufficient pumps, including on-site backup pumps, to maintain downstream flows;
 - (b) construct dams with materials that prevent sediment and other pollutants from entering the waterbody (e.g., sandbags or clean gravel with plastic liner);
 - (c) screen pump intakes to minimize entrainment of fish;
 - (d) prevent streambed scour at pump discharge; and
 - (e) continuously monitor the dam and pumps to ensure proper operation throughout the waterbody crossing.

- c. Flume Crossing

The flume crossing method requires implementation of the following steps:

- (1) install flume pipe after blasting (if necessary) but before any trenching;
 - (2) use sand bag or sand bag and plastic sheeting diversion structure or equivalent to develop an effective seal and to divert stream flow through the flume pipe (some modifications to the stream bottom may be required to achieve an effective seal);
 - (3) properly align flume pipe(s) to prevent bank erosion and streambed scour;
 - (4) do not remove flume pipe during trenching, pipe laying, or backfilling activities, or initial streambed restoration efforts; and

- (5) remove all flume pipes and dams that are not also part of the equipment bridge as soon as final cleanup of the stream bed and bank is complete.

d. Horizontal Directional Drill

For each waterbody or wetland that would be crossed using the HDD method, Transco will file with the Secretary for the review and written approval by the Director, a plan that includes:

- (1) site-specific construction diagrams that show the location of mud pits, pipe assembly areas, and all areas to be disturbed or cleared for construction;
- (2) justification that disturbed areas are limited to the minimum needed to construct the crossing;
- (3) identification of any aboveground disturbance or clearing between the HDD entry and exit workspaces during construction;
- (4) a description of how an inadvertent release of drilling mud would be contained and cleaned up; and
- (5) a contingency plan for crossing the waterbody or wetland in the event the HDD is unsuccessful and how the abandoned drill hole would be sealed, if necessary.

7. Crossings of Minor Waterbodies

Where a dry-ditch crossing is not required, minor waterbodies may be crossed using the open-cut crossing method, with the following restrictions:

- a. except for blasting and other rock-breaking measures, complete instream construction activities (including trenching, pipe installation, backfill, and restoration of the streambed contours) within 24 hours.
- b. streambanks and unconsolidated streambeds may require additional restoration after this period;
- c. limit use of equipment operating in the waterbody to that needed to construct the crossing; and
- d. equipment bridges are not required at minor waterbodies that do not have a state-designated fishery classification or protected status (e.g., agricultural or intermittent drainage ditches). However, if an equipment bridge is used it must be constructed as described in Section V.B.5.

8. Crossings of Intermediate Waterbodies

Where a dry-ditch crossing is not required, Transco will cross intermediate waterbodies using the open-cut crossing method, with the following restrictions:

- a. complete instream construction activities (not including blasting and other rock-breaking measures) within 48 hours unless site-specific conditions make completion within 48 hours infeasible;
- b. limit use of equipment operating in the waterbody to that needed to construct the crossing; and
- c. all other construction equipment must cross on an equipment bridge as specified in Section V.B.5.

9. Crossings of Major Waterbodies

Before construction, Transco will file with the Secretary for the review and written approval by the Director a detailed, site-specific construction plan and scaled drawings identifying all areas to be disturbed by construction for each major waterbody crossing. This plan will be developed in consultation with the appropriate state and federal agencies and shall include extra work areas, ATWS areas, spoil storage areas, sediment control structures, etc., as well as mitigation for navigational issues.

The Environmental Inspector may adjust the final placement of the erosion and sediment control structures in the field to maximize effectiveness.

10. Temporary Erosion and Sediment Control

Install sediment barriers (as defined in Section IV.F.3.a of the Transco Plan) immediately after initial disturbance of the waterbody or adjacent upland.

Sediment barriers will be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench) until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Transco Plan; however, Transco will implement the following specific measures at stream crossings:

- a. install sediment barriers across the entire construction right-of-way at all waterbody crossings, where necessary, to prevent the flow of sediments into the waterbody. Removable sediment barriers (or drivable berms) must be installed across the travel lane. These removable sediment barriers can be removed during the construction day but must be re-installed after construction has stopped for the day and/or when heavy precipitation is imminent;
- b. where waterbodies are adjacent to the construction right-of-way and the right-of-way slopes toward the waterbody, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoils

within the construction right-of-way and prevent sediment flow into the waterbody; and

- c. use temporary trench plugs at all waterbody crossings, as necessary, to prevent diversion of water into upland portions of the pipeline trench and to keep any accumulated trench water out of the waterbody.

11. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any waterbody. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Use clean gravel or native cobbles for the upper 1 foot of trench backfill in all waterbodies that contain cold water fisheries.
2. For open-cut crossings, stabilize waterbody banks and install temporary sediment barriers within 24 hours of completing instream construction activities. For dry-ditch crossings, complete streambed and bank stabilization before returning flow to the waterbody channel.
3. Return all waterbody banks to preconstruction contours or to a stable angle of repose as approved by the Environmental Inspector.
4. Install erosion control fabric or a functional equivalent on waterbody banks at the time of final bank re-contouring. Do not use synthetic monofilament mesh/netted erosion control materials in areas designated as sensitive wildlife habitat unless the product is specifically designed to minimize harm to wildlife. Anchor erosion control fabric with staples or other appropriate devices.
5. Application of riprap for bank stabilization must comply with USACE, or its delegated agency, permit terms and conditions.
6. Unless otherwise specified by state permit, limit the use of riprap to areas where flow conditions preclude effective vegetative stabilization techniques such as seeding and erosion control fabric.
7. Revegetate disturbed riparian areas with native species of conservation grasses, legumes, and woody species, similar in density to adjacent undisturbed lands.
8. Unless more stringent guidelines are established, Transco will install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent that are less than 50 feet from the waterbody, or as needed to prevent sediment transport into the waterbody. In addition, Transco will install sediment barriers as outlined in the Transco Plan.
9. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the waterbody.

10. Sections V.C.3 through V.C.7 above also apply to those perennial or intermittent streams not flowing at the time of construction.

D. POST-CONSTRUCTION MAINTENANCE

1. Limit routine vegetation mowing or clearing adjacent to waterbodies to allow a riparian strip at least 25 feet wide, as measured from the waterbody's mean high water mark, to permanently revegetate with native plant species across the entire construction right-of-way. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees that are located within 15 feet of the pipeline that have roots that could compromise the integrity of the pipeline coating may be cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in riparian areas that are between HDD entry and exit points.
2. Do not use herbicides or pesticides in or within 100 feet of a waterbody except as allowed by the appropriate land management or state agency.
3. Time-of-year restrictions specified in Section VII.A.6 of the Transco Plan (April 1 – August 31 of any year) apply to routine mowing and clearing of riparian areas.

VI. **WETLAND CROSSINGS**

A. GENERAL

1. Transco will conduct wetland delineations using the current federal methodology and will file a wetland delineation report with the Secretary before construction.

This report will identify:

- a. by milepost all wetlands that would be affected;
- b. the National Wetlands Inventory (NWI) classification for each wetland;
- c. the crossing length of each wetland in feet; and
- d. the area of permanent and temporary disturbance that would occur in each wetland by NWI classification type.

The requirements outlined in this section do not apply to wetlands in actively cultivated or rotated cropland. Standard upland protective measures, including workspace and topsoiling requirements, apply to these agricultural wetlands.

2. Route the pipeline to avoid wetland areas to the maximum extent possible. If a wetland cannot be avoided or crossed by following an existing right-of-way, route the new pipeline in a manner that minimizes disturbance to wetlands. Where looping an existing pipeline, overlap the existing pipeline right-of-way with the new construction right-of-way. In addition, locate the loop line no more than 25 feet

away from the existing pipeline unless site-specific constraints would adversely affect the stability of the existing pipeline.

3. Limit the width of the construction right-of-way to 75 feet or less. Prior written approval of the Director is required where topographic conditions or soil limitations require that the construction right-of-way width within the boundaries of a federally delineated wetland be expanded beyond 75 feet. Early in the planning process Transco will identify site-specific areas where excessively wide trenches could occur and/or where spoil piles could be difficult to maintain because existing soils lack adequate unconfined compressive strength.
4. Wetland boundaries and buffers will be clearly marked in the field with signs and/or highly visible flagging until construction-related ground-disturbing activities are complete.
5. Implement the measures of Sections V and VI in the event a waterbody crossing is located within or adjacent to a wetland crossing. If all measures of Sections V and VI cannot be met, Transco will file with the Secretary a site-specific crossing plan for review and written approval by the Director before construction. This crossing plan will address at a minimum:
 - a. spoil control;
 - b. equipment bridges;
 - c. restoration of waterbody banks and wetland hydrology;
 - d. timing of the waterbody crossing;
 - e. method of crossing; and
 - f. size and location of all extra work areas and ATWS areas.
6. Do not locate aboveground facilities in any wetland, except where the location of such facilities outside of wetlands would prohibit compliance with U.S. Department of Transportation regulations.

B. INSTALLATION

1. Extra Work Areas and Access Roads
 - a. Locate all extra work areas (such as staging areas) and ATWS (such as additional spoil storage areas) at least 50 feet away from wetland boundaries, except where the adjacent upland consists of cultivated or rotated cropland or other disturbed land.
 - b. Transco will file with the Secretary, for review and written approval by the Director, site-specific justification for each extra work area and ATWS with a less than 50-foot setback from wetland boundaries, except where adjacent upland consists of cultivated or rotated cropland or other disturbed

land. The justification will specify the site-specific conditions that will not permit a 50-foot setback and measures to ensure the wetland is adequately protected.

- c. The construction right-of-way may be used for access when the wetland soil is firm enough to avoid rutting or the construction right-of-way has been appropriately stabilized to avoid rutting (e.g., with timber riprap, prefabricated equipment mats, or terra mats).
- d. In wetlands that cannot be appropriately stabilized, all construction equipment other than that needed to install the wetland crossing shall use access roads located in upland areas. Where access roads in upland areas do not provide reasonable access, limit all other construction equipment to one pass through the wetland using the construction right-of-way.
- e. The only access roads, other than the construction right-of-way, that can be used in wetlands are those existing roads that can be used with no modifications or improvements, other than routine repair, and no impact on the wetland.

2. Crossing Procedures

- a. Comply with USACE, or its delegated agency, permit terms and conditions.
- b. Assemble the pipeline in an upland area unless the wetland is dry enough to adequately support skids and pipe.
- c. Use “push-pull” or “float” techniques to place the pipe in the trench where water and other site conditions allow.
- d. Minimize the length of time that topsoil is segregated and the trench is open. Do not trench the wetland until the pipeline is assembled and ready for lowering in.
- e. Limit construction equipment operating in wetland areas to that needed to clear the construction right-of-way, dig the trench, fabricate and install the pipeline, backfill the trench, and restore the construction right-of-way.
- f. Cut vegetation just above ground level, leaving existing root systems in place, and remove it from the wetland for disposal.
- g. Transco may burn woody debris in wetlands, if approved by the USACE and in accordance with state and local regulations, ensuring that all remaining woody debris is removed for disposal.
- h. Limit pulling of tree stumps and grading activities to directly over the trenchline. Do not grade or remove stumps or root systems from the rest of the construction right-of-way in wetlands unless the Chief Inspector and Environmental Inspector determine that safety-related construction

constraints require grading or the removal of tree stumps from under the working side of the construction right-of-way.

- i. Segregate the top 1 foot of topsoil from the area disturbed by trenching, except in areas where standing water is present or soils are saturated. Immediately after backfilling is complete, restore the segregated topsoil to its original location.
- j. Do not use rock, soil imported from outside the wetland, tree stumps, or brush riprap to support equipment on the construction right-of-way.
- k. If standing water or saturated soils are present, or if construction equipment causes ruts or mixing of the topsoil and subsoil in wetlands, use low-ground-weight construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats, or terra mats.
- l. Remove all Project-related material used to support equipment on the construction right-of-way upon completion of construction.

3. Temporary Sediment Control

Install sediment barriers (as defined in Section IV.F.3.a of the Transco Plan) immediately after initial disturbance of the wetland or adjacent upland. Sediment barriers must be properly maintained throughout construction and reinstalled as necessary (such as after backfilling of the trench). Except as noted below in Section VI.B.3.c, maintain sediment barriers until replaced by permanent erosion controls or restoration of adjacent upland areas is complete. Temporary erosion and sediment control measures are addressed in more detail in the Plan.

- a. Install sediment barriers across the entire construction right-of-way immediately upslope of the wetland boundary at all wetland crossings where necessary to prevent sediment flow into the wetland.
- b. Where wetlands are adjacent to the construction right-of-way and the right-of-way slopes toward the wetland, install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil within the construction right-of-way and prevent sediment flow into the wetland.
- c. Install sediment barriers along the edge of the construction right-of-way as necessary to contain spoil and sediment within the construction right-of-way through wetlands. Remove these sediment barriers during right-of-way cleanup.

4. Trench Dewatering

Dewater the trench (either on or off the construction right-of-way) in a manner that does not cause erosion and does not result in silt-laden water flowing into any wetland. Remove the dewatering structures as soon as practicable after the completion of dewatering activities.

C. RESTORATION

1. Where the pipeline trench may drain a wetland, construct trench breakers at the wetland boundaries and/or seal the trench bottom as necessary to maintain the original wetland hydrology.
2. Restore pre-construction wetland contours to maintain the original wetland hydrology.
3. For each wetland crossed, install a trench breaker at the base of slopes near the boundary between the wetland and adjacent upland areas. Install a permanent slope breaker across the construction right-of-way at the base of slopes greater than 5 percent where the base of the slope is less than 50 feet from the wetland, or as needed to prevent sediment transport into the wetland. In addition, install sediment barriers as outlined in the Transco Plan. In some areas, with the approval of the Environmental Inspector, an earthen berm may be suitable as a sediment barrier adjacent to the wetland.
4. Do not use fertilizer, lime, or mulch unless required in writing by the appropriate federal or state agency.
5. Transco will consult with the appropriate federal or state agencies to develop a Project-specific wetland restoration plan. The restoration plan will include measures for re-establishing herbaceous and/or woody species, controlling the invasion and spread of invasive species and noxious weeds (e.g., purple loosestrife and phragmites), and monitoring the success of the revegetation and weed control efforts. Refer to the Project-specific Noxious Weed and Invasive Plant Management Plan (see Attachment 10 in Appendix 1B to RR 1).
6. Until a Project-specific wetland restoration plan is developed and/or implemented, temporarily revegetate the construction right-of-way with annual ryegrass at a rate of 40 pounds/acre (unless standing water is present).
7. Ensure that all disturbed areas successfully revegetate with wetland herbaceous and/or woody plant species.
8. Remove temporary sediment barriers located at the boundary between wetland and adjacent upland areas after revegetation and stabilization of adjacent upland areas are judged to be successful, as specified in Section VII.A.5 of the Transco Plan.

D. POST-CONSTRUCTION MAINTENANCE AND REPORTING

1. Do not conduct routine vegetation mowing or clearing over the full width of the permanent right-of-way in wetlands. However, to facilitate periodic corrosion/leak surveys, a corridor centered on the pipeline and up to 10 feet wide may be cleared at a frequency necessary to maintain the 10-foot corridor in an herbaceous state. In addition, trees within 15 feet of the pipeline with roots that could compromise the integrity of pipeline coating may be selectively cut and removed from the permanent right-of-way. Do not conduct any routine vegetation mowing or clearing in wetlands that are between HDD entry and exit points.

2. Do not use herbicides or pesticides in or within 100 feet of a wetland, except as allowed by the appropriate federal or state agency.
3. Time-of-year restrictions specified in Section VII.A.6 of the Transco Plan (April 1 – August 31 of any year) apply to routine mowing and clearing of wetland areas.
4. Monitor and record the success of wetland revegetation annually until wetland revegetation is successful.
5. Wetland revegetation shall be considered successful if all of the following criteria are satisfied:
 - a. the affected wetland satisfies the current federal definition for a wetland (i.e., soils, hydrology, and vegetation);
 - b. vegetation is at least 80 percent of either the cover documented for the wetland prior to construction or at least 80 percent of the cover in adjacent wetland areas that were not disturbed by construction;
 - c. if natural rather than active revegetation was used, the plant species composition is consistent with early successional wetland plant communities in the affected ecoregion; and
 - d. invasive species and noxious weeds are absent, unless they are abundant in adjacent areas that were not disturbed by construction.
6. Within three years after construction, Transco will file a report with the Secretary identifying the status of the wetland revegetation efforts and documenting success as defined in Section VI.D.5, above.

For any wetland where revegetation is not successful at the end of three years after construction, Transco will develop and implement (in consultation with a professional wetland ecologist) a remedial revegetation plan to actively revegetate wetlands. Continue revegetation efforts and file a report annually documenting progress in these wetlands until wetland revegetation is successful.

VII. HYDROSTATIC TESTING

A. NOTIFICATION PROCEDURES AND PERMITS

1. Apply for state-issued water withdrawal permits, as required.
2. Apply for National Pollutant Discharge Elimination System (NPDES) or state-issued discharge permits, as required.
3. Notify appropriate state agencies of intent to use specific sources at least 48 hours before testing activities unless they waive this requirement in writing.

B. GENERAL

1. Perform 100 percent radiographic inspection of all pipeline section welds or hydrotest the pipeline sections before installation under waterbodies or wetlands.
2. If pumps used for hydrostatic testing are within 100 feet of any waterbody or wetland, address secondary containment and the refueling of these pumps in the Project-specific Spill Prevention and Response Procedures. Refer to the Spill Plan for Oil and Hazardous Materials (see Attachment 9 to Appendix 1B).
3. Transco will file with the Secretary, before construction, a list identifying the location of all waterbodies proposed for use as a hydrostatic test water source or discharge location.

C. INTAKE SOURCE AND RATE

1. Screen the intake hose to minimize the potential for entrainment of fish.
2. Do not use state-designated exceptional value waters, waterbodies that provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies unless appropriate federal, state, and/or local permitting agencies grant written permission.
3. Maintain adequate flow rates to protect aquatic life, provide for all waterbody uses, and provide for downstream withdrawals of water by existing users.
4. Locate hydrostatic test manifolds outside wetlands and riparian areas to the maximum extent practicable.

D. DISCHARGE LOCATION, METHOD, AND RATE

1. Regulate discharge rate, use energy dissipation device(s), and install sediment barriers, as necessary, to prevent erosion, streambed scour, suspension of sediments, or excessive streamflow.
2. Do not discharge into state-designated exceptional value waters, waterbodies that provide habitat for federally listed threatened or endangered species, or waterbodies designated as public water supplies unless appropriate federal, state, and local permitting agencies grant written permission.

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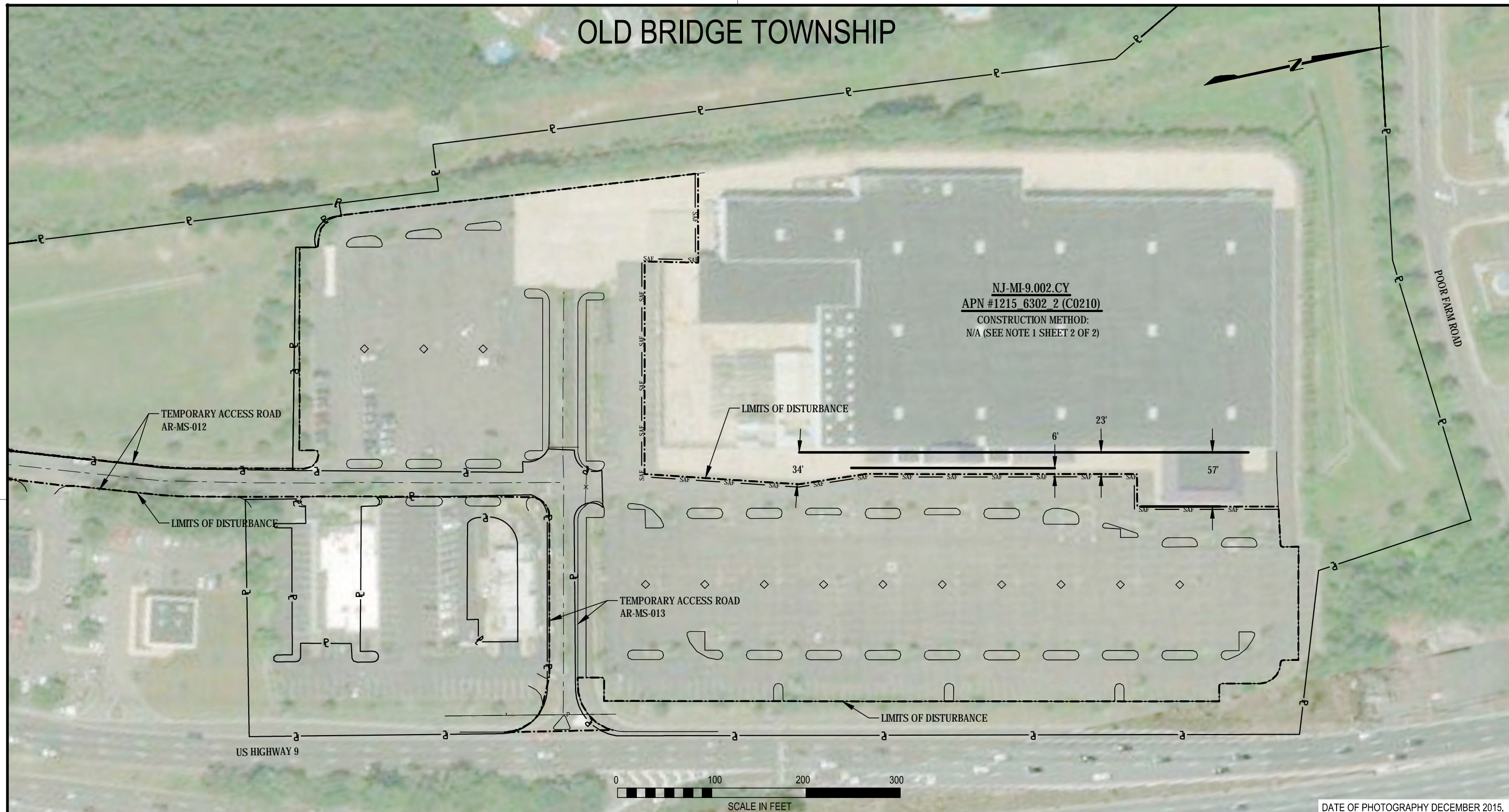
APPENDIX G

RESIDENTIAL CONSTRUCTION PLANS

OLD BRIDGE TOWNSHIP

NJ-MI-9.002.CY
APN #1215 6302 2 (C0210)
CONSTRUCTION METHOD:
N/A (SEE NOTE 1 SHEET 2 OF 2)

G-1



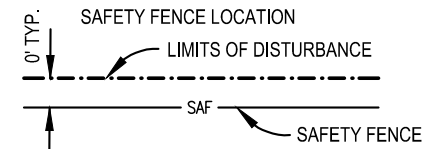
DATE OF PHOTOGRAPHY DECEMBER 2015.

LEGEND

- | | | | |
|--|---------------------------------|--|--|
| | PROPOSED 26" MADISON LOOP | | STREAM CROSSING |
| | EXISTING 42" LOWER BAY LOOP "C" | | RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION |
| | EXISTING TGPL R/W | | SINGLE TREE |
| | PROPOSED TGPL R/W | | TREE LINE |
| | PROPERTY LINE | | EXISTING FENCE |
| | ROAD EASEMENT | | SANITARY SEWER |
| | UTILITY EASEMENT | | WATER LINE |
| | LIMITS OF DISTURBANCE | | CABLE LINE |
| | CONSTRUCTION SAFETY FENCE | | OVERHEAD POWER LINE |
| | WETLAND AREA | | POWER POLE |



MUSTANG OF NEW JERSEY



THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.			REFERENCE TITLE			
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185727	W.	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
FOR THE PROPERTY OF TRACT NO. NJ-MI-9.002.CY
OLD BRIDGE TOWNSHIP
MIDDLESEX COUNTY, NEW JERSEY

DRAWN BY: MH	DATE: 01/30/18	ISSUED FOR BID:	SCALE: 1" = 100'
CHECKED BY: CLR	DATE: 01/30/18	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: EL	DATE: 02/01/18	DRAWING NUMBER: 24-0100-80-06D-B/9.19-01	SHEET 1
WO: 1185727	ROUTE ID: 311 CIVIL: 03/09/18 LAND: 12/18/17 ENV: 05/04/17	4/24/2018 K:\MAPPING\NA\LAT\LOOP\0857_16\ACQUISITION\06D-RCP\06D-24-0100-80-06D-B-9.19-01.dwg	Mark Ho OF 2

OLD BRIDGE TOWNSHIP

NOTES:

- 1. CONSTRUCTION TECHNIQUES TO BE USED TO MINIMIZE IMPACT TO THIS RESIDENCE ARE DENOTED ON SHEET 1 OF THIS DRAWING. CONSTRUCTION TECHNIQUES INCLUDE REDUCED PIPELINE SEPARATION (N), DRAG SECTION (D), WORKING OVER EXISTING PIPELINE (W), PIPELINE CROSSOVERS (C), REDUCED CONSTRUCTION RIGHT-OF-WAY (R).
- 2. EXCAVATION OF THE PIPELINE TRENCH WILL NOT BE INITIATED UNTIL THE PIPE IS READY FOR INSTALLATION. THE PIPELINE TRENCH SHALL BE BACKFILLED IMMEDIATELY UPON COMPLETION OF THE PIPELINE INSTALLATION.
- 3. HOMEOWNER SHALL BE NOTIFIED ONE (1) WEEK PRIOR TO EXCAVATION OF PIPELINE TRENCH.
- 4. CONSTRUCTION SAFETY PERIMETER FENCING SHALL BE INSTALLED AND MAINTAINED ALONG THE WORK AREA. "SEE LOCATION DETAIL THIS SHEET. REMOVE AFTER RESTORATION IS COMPLETE."
- 5. ALL FEATURES WITHIN THE CONSTRUCTION WORK AREA OR LIMITS OF DISTURBANCE SHALL BE REMOVED EXCEPT AS NOTED ON THE DRAWING. MATURE TREES AND LANDSCAPING WITHIN THE EDGE OF THE CONSTRUCTION WORK AREA MAY BE SAVED UNLESS NECESSARY TO REMOVE FOR SAFE OPERATION OF CONSTRUCTION EQUIPMENT.
- 6. CONTRACTOR SHALL MAINTAIN RESIDENTIAL ACCESS AT ALL TIMES. IF APPLICABLE, CONTRACTOR SHALL PROVIDE PRIOR NOTICE TO COMPANY WHEN THE EXISTING DRIVEWAY IS PLANNED TO BE OPEN CUT. COMPANY SHALL THEN NOTIFY THE HOMEOWNER(S). DRIVEWAY ACCESS MAY BE TEMPORARILY CLOSED FOR THE PIPELINE INSTALLATION, STEEL PLATES SHALL BE USED ACROSS THE OPEN TRENCH IF NOT BACKFILLED DURING SAME WORK DAY.
- 7. THIS PROPERTY

☐ (DOES)

☐ (DOES NOT) HAVE A SEPTIC SYSTEM

☐ (DOES)

☐ (DOES NOT) HAVE A WATER WELL

☐

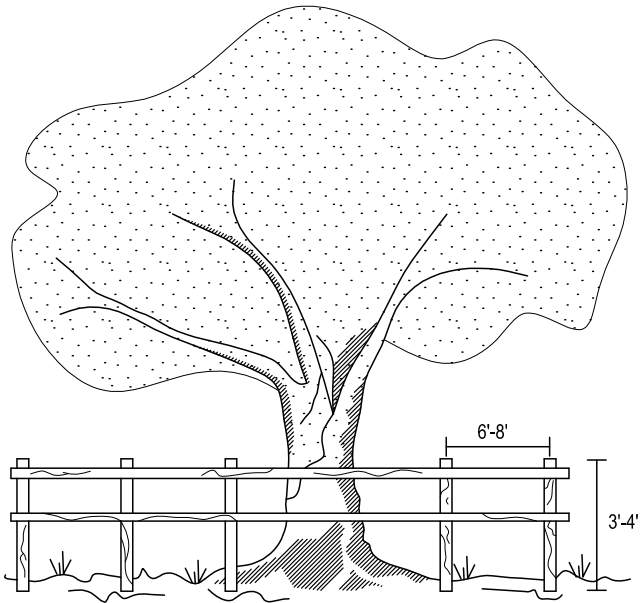
☐

☐
- 8. A MOBILE WATER TRUCK WILL BE USED TO CONTROL DUST ON THE R.O.W. AS NEEDED.
- 9. TRANSCONTINENTAL GAS PIPE LINE COMPANY, LLC IS OFFERING PRE-CONSTRUCTION AND POST-CONSTRUCTION MONITORING PROGRAM. THE HOMEOWNER:

☐ ACCEPTS

☐ DECLINES TO PARTICIPATE

BARRICADE DETAIL
FOR PROTECTED AND GRAND TREES

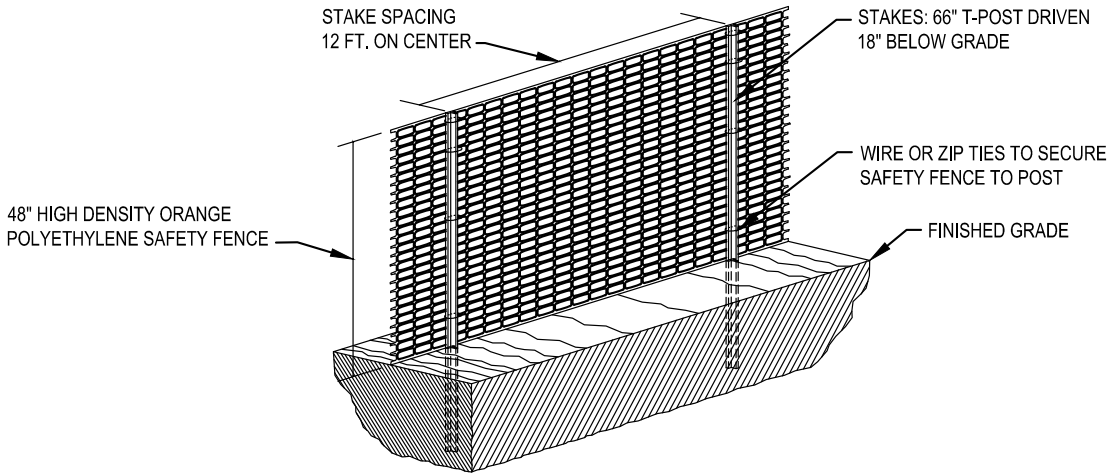



HORIZONTAL: WOOD MEMBER, ORANGE FENCING,
CHAIN LINK FENCE OR OTHER
APPROVED MATERIAL

VERTICAL: WOOD MEMBER OR APPROVED MATERIAL
BARRICADES PLACED AT DESIGNATED
PROTECTIVE ROOT ZONE.

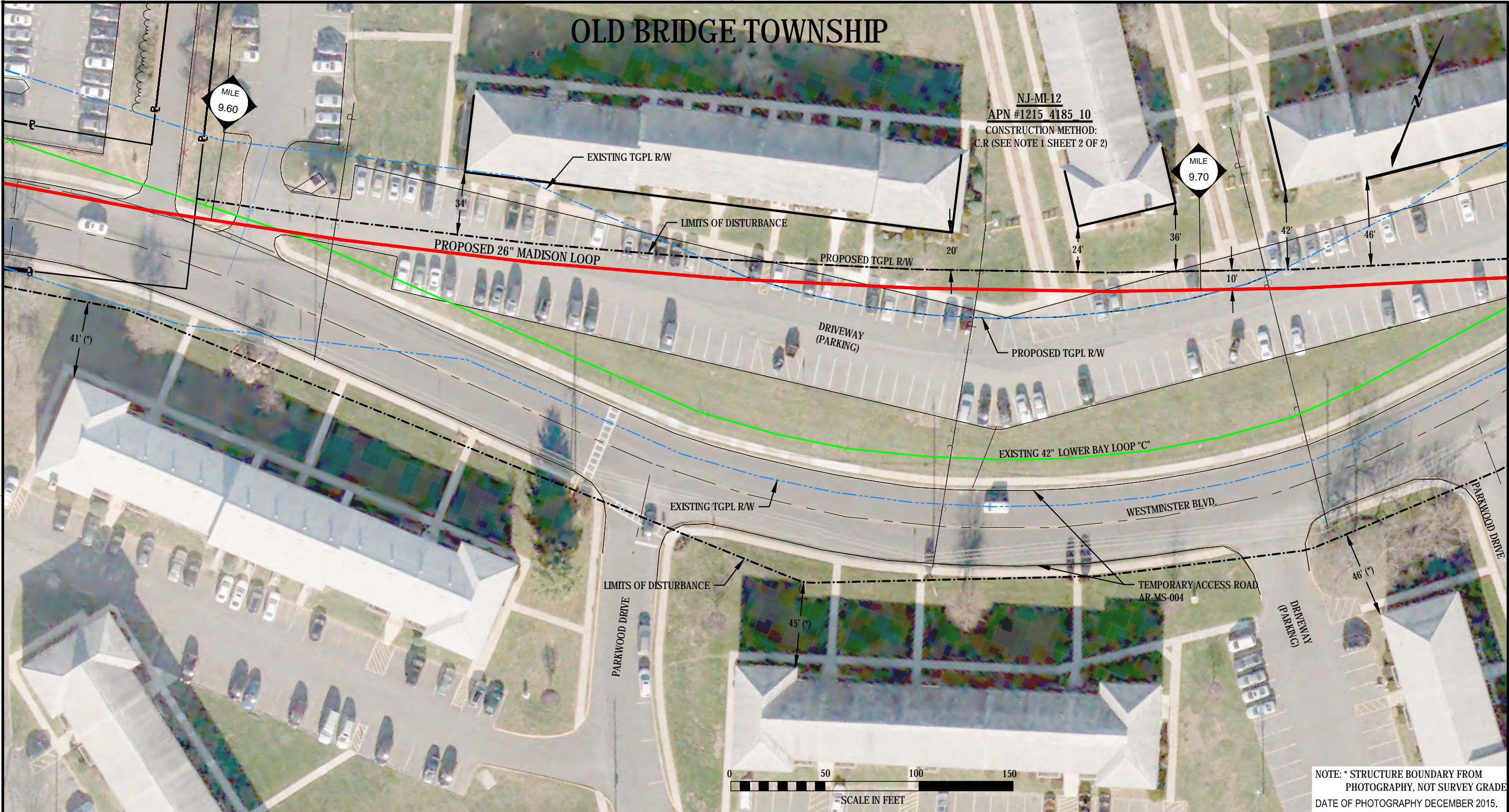
- 1. ALL SENSITIVE AREAS SHALL BE PROTECTED AS PER PLAN.
- 2. WHEN PRACTICABLE, INSTALL HIGH VISIBILITY FENCE 3 FEET OUTSIDE THE DRIP LINE OF THE TREE.
- 3. SAFETY FENCE SHOULD BE FASTENED SECURELY TO THE POST.
- 4. THE FENCE MUST REMAIN IN PLACE DURING ALL PHASES OF CONSTRUCTION; ANY CHANGE OF THE PROTECTIVE FENCING MUST BE APPROVED.

SAFETY FENCE



DRAWING NO.		REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC RESIDENTIAL CONSTRUCTION PLAN NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP FOR THE PROPERTY OF TRACT NO. NJ-MI-9.002.CY OLD BRIDGE TOWNSHIP MIDDLESEX COUNTY, NEW JERSEY					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: MH	DATE: 01/30/18	ISSUED FOR BID:	SCALE: N.T.S.	
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							APPROVED BY: EL	DATE: 02/01/18	DRAWING NUMBER: 24-0100-80-06D-B/9.19-01	SHEET 2	
							WO: 1185727	ROUTE ID: 311 CIVIL: 03/09/18 9:31am 4/16/2018 MarkHo	OF 2		
							LAND: 12/18/17 ENV: 05/04/17 K:\MAPPING\NA\LAT\LOOP\0857_16\ACQUISITION\06D-RCP\0wg\24-0100-80-06D-B_9.19-01.dwg				

G-3



LEGEND

- PROPOSED 26" MADISON LOOP
- EXISTING 42" LOWER BAY LOOP "C"
- EXISTING TGPL R/W
- PROPOSED TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- UTILITY EASEMENT
- LIMITS OF DISTURBANCE
- CONSTRUCTION SAFETY FENCE
- WETLAND AREA

- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- SANITARY SEWER
- WATER LINE
- CABLE LINE
- OVERHEAD POWER LINE
- POWER POLE

MUSTANG OF NEW JERSEY

SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

SAF SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE	

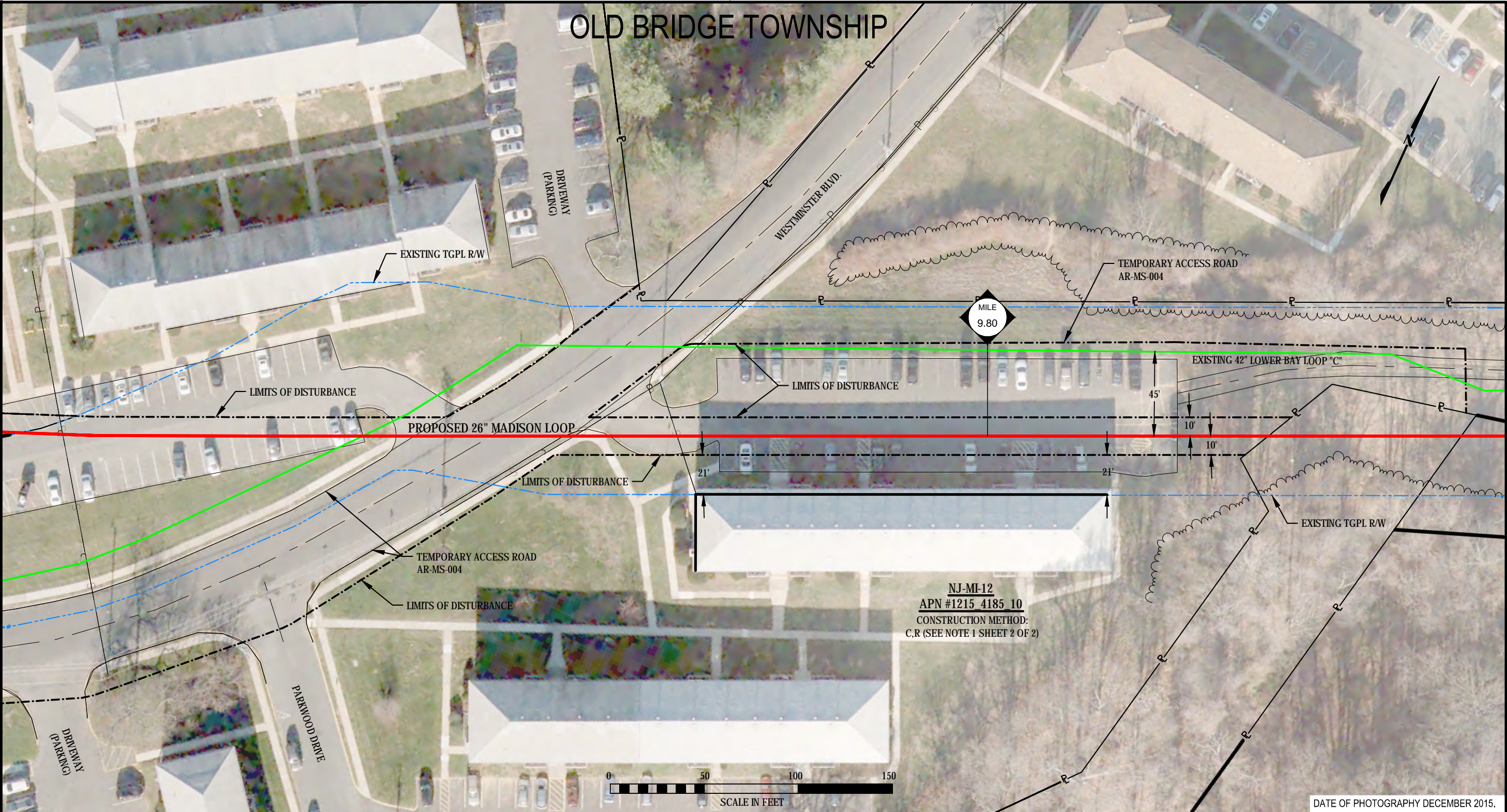
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2	05/10/18	FH	ISSUED FOR FERC SUPPLEMENTAL #6	1185727	W.	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
FOR THE PROPERTY OF TRACT NO. NJ-MI-12
OLD BRIDGE TOWNSHIP
MIDDLESEX COUNTY, NEW JERSEY

William's

DRAWN BY: FH	DATE: 12/20/16	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 12/27/16	ISSUED FOR CONSTRUCTION:	REVISION: 2
APPROVED BY: EL	DATE: 01/09/17	DRAWING NUMBER: 24-0100-80-06D-B_9.62-01	SHEET 1 OF 2
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G-4



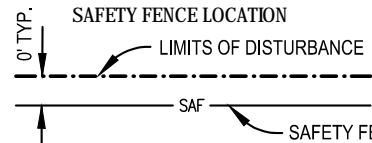
NJ-MI-12
APN #1215 4185 10
CONSTRUCTION METHOD:
C,R (SEE NOTE 1 SHEET 2 OF 2)

LEGEND

- PROPOSED 26" MADISON LOOP
- EXISTING 42" LOWER BAY LOOP "C"
- EXISTING TGPL R/W
- PROPOSED TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- UTILITY EASEMENT
- LIMITS OF DISTURBANCE
- CONSTRUCTION SAFETY FENCE
- WETLAND AREA
- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- SANITARY SEWER
- WATER LINE
- CABLE LINE
- OVERHEAD POWER LINE
- POWER POLE



MUSTANG OF NEW JERSEY



THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE					
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
FOR THE PROPERTY OF TRACT NO. NJ-MI-12
OLD BRIDGE TOWNSHIP
MIDDLESEX COUNTY, NEW JERSEY



DRAWN BY: FH	DATE: 05/12/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 05/12/17	ISSUED FOR CONSTRUCTION:	REVISION: 1
APPROVED BY: EL	DATE: 05/12/17	DRAWING NUMBER: 24-0100-80-06D-B/9.80-01	SHEET 1 OF 2
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OLD BRIDGE TOWNSHIP

NJ-MI-16
APN # 1215-4185-4.11
CONSTRUCTION METHOD:
W (SEE NOTE 1 SHEET 2 OF 2)

WESTMINSTER BLVD.

TEMPORARY ACCESS ROAD
AR-MS-007

TEMPORARY ACCESS ROAD
AR-MS-004

LIMITS OF DISTURBANCE

EXISTING 42" LOWER BAY LOOP "C"

PROPOSED 26" MADISON LOOP

EXISTING TGPL R/W



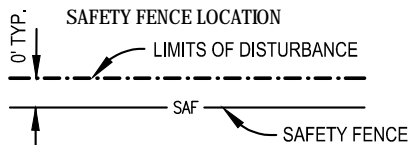
NOTE: * STRUCTURE BOUNDARY FROM
PHOTOGRAPHY, NOT SURVEY GRADE
DATE OF PHOTOGRAPHY DECEMBER 2015.

LEGEND

- PROPOSED 26" MADISON LOOP
- EXISTING 42" LOWER BAY LOOP "C"
- EXISTING TGPL R/W
- PROPOSED TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- UTILITY EASEMENT
- LIMITS OF DISTURBANCE
- SAF CONSTRUCTION SAFETY FENCE
- WETLAND AREA
- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- SANITARY SEWER
- WATER LINE
- CABLE LINE
- OVERHEAD POWER LINE
- POWER POLE



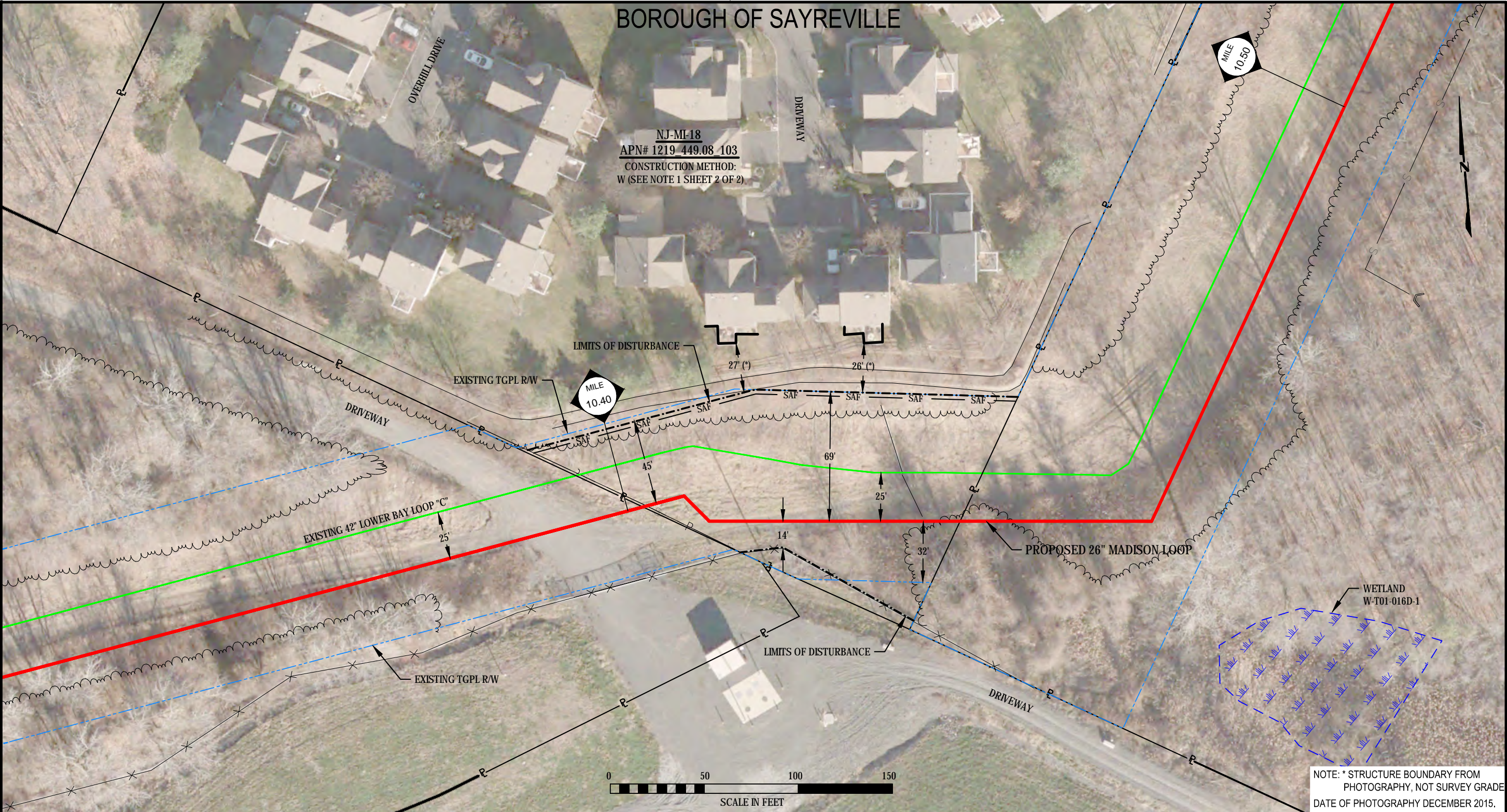
MUSTANG OF NEW JERSEY



THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.				REFERENCE TITLE			
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				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC RESIDENTIAL CONSTRUCTION PLAN NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP FOR THE PROPERTY OF TRACT NO. NJ-MI-16 OLD BRIDGE TOWNSHIP MIDDLESEX COUNTY, NEW JERSEY			
				DRAWING NUMBER: 24-0100-80-06D-B_9.83-01			
				SCALE: 1" = 50'			
				REVISION: 2			
				SHEET 1 OF 2			

G-6



NOTE: * STRUCTURE BOUNDARY FROM PHOTOGRAPHY, NOT SURVEY GRADE
DATE OF PHOTOGRAPHY DECEMBER 2015.

LEGEND

	PROPOSED 26" MADISON LOOP		STREAM CROSSING
	EXISTING 42" LOWER BAY LOOP "C"		RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
	EXISTING TGPL R/W		SINGLE TREE
	PROPOSED TGPL R/W		TREE LINE
	PROPERTY LINE		EXISTING FENCE
	ROAD EASEMENT		SANITARY SEWER
	UTILITY EASEMENT		WATER LINE
	LIMITS OF DISTURBANCE		CABLE LINE
	CONSTRUCTION SAFETY FENCE		OVERHEAD POWER LINE
	WETLAND AREA		POWER POLE

MUSTANG OF NEW JERSEY

0' TYP. SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

SAF SAFETY FENCE

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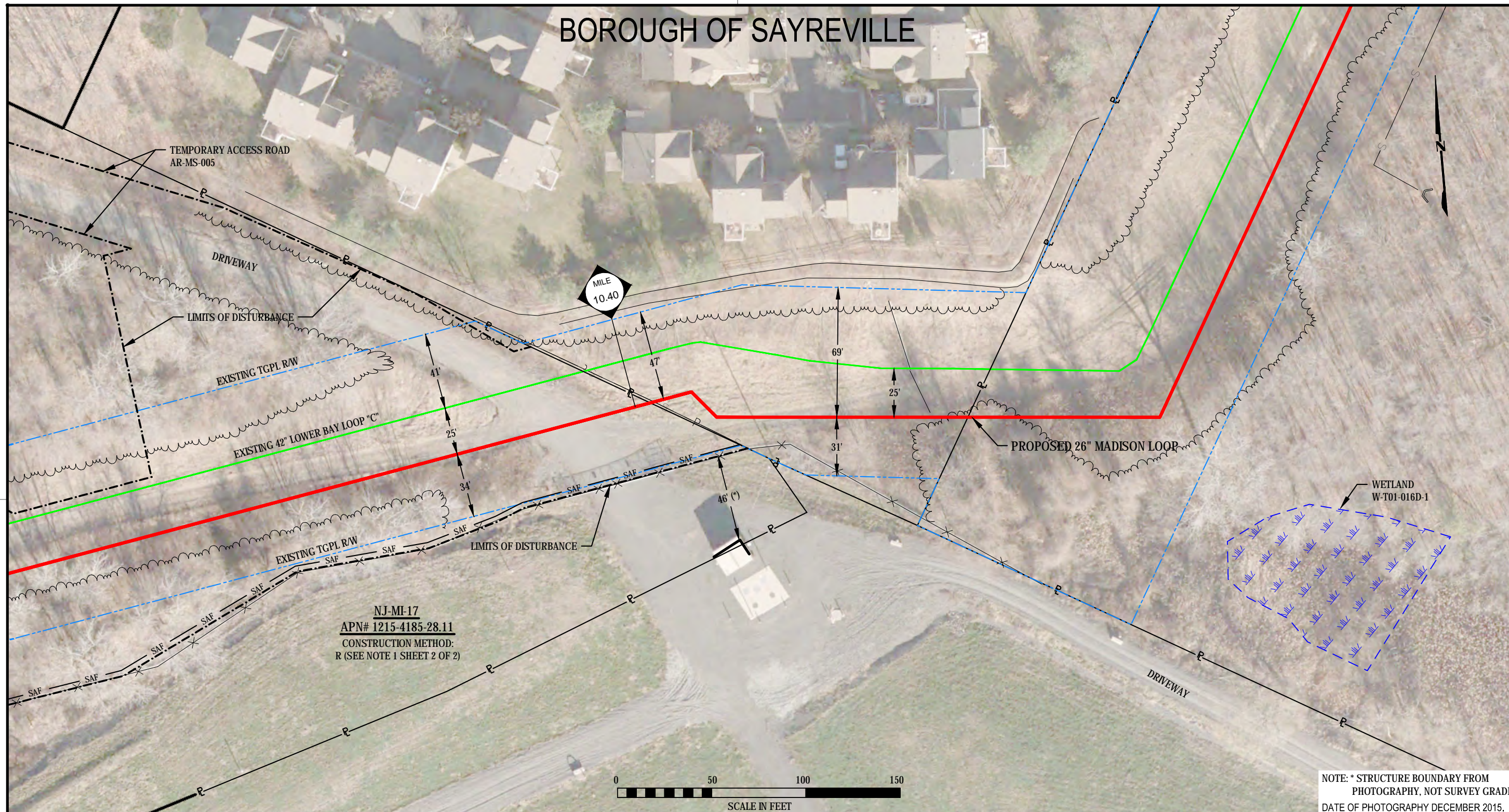
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NO.	DATE	BY	REVISION DESCRIPTION
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1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6

W.O. NO.	CHK.	APP.	DRAWN BY:	FH	DATE:	12/20/16	ISSUED FOR BID:	SCALE:	1" = 50'
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WO: 1185727				ROUTE ID: 311 CIVIL: 03/09/18		4/17/2018		Mark Ho	
				LAND: 12/18/17 ENV: 05/04/17		K:\MAPPING\VA\LAT\LOOP\0857_16\ACQUISITION\0857-16D-0100-80-06D-B/10.40-01.dwg		SHEET 1 OF 2	

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
FOR THE PROPERTY OF TRACT NO. NJ-MI-18
BOROUGH OF SAYREVILLE
MIDDLESEX COUNTY, NEW JERSEY

BOROUGH OF SAYREVILLE

G-7



NOTE: * STRUCTURE BOUNDARY FROM PHOTOGRAPHY, NOT SURVEY GRADE
DATE OF PHOTOGRAPHY DECEMBER 2015.

LEGEND

	PROPOSED 26" MADISON LOOP		STREAM CROSSING
	EXISTING 42" LOWER BAY LOOP "C"		RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
	EXISTING TGPL R/W		SINGLE TREE
	PROPOSED TGPL R/W		TREE LINE
	PROPERTY LINE		EXISTING FENCE
	ROAD EASEMENT		SANITARY SEWER
	UTILITY EASEMENT		WATER LINE
	LIMITS OF DISTURBANCE		CABLE LINE
	CONSTRUCTION SAFETY FENCE		OVERHEAD POWER LINE
	WETLAND AREA		POWER POLE

MUSTANG OF NEW JERSEY

0' TYP. SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

SAF SAFETY FENCE

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NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
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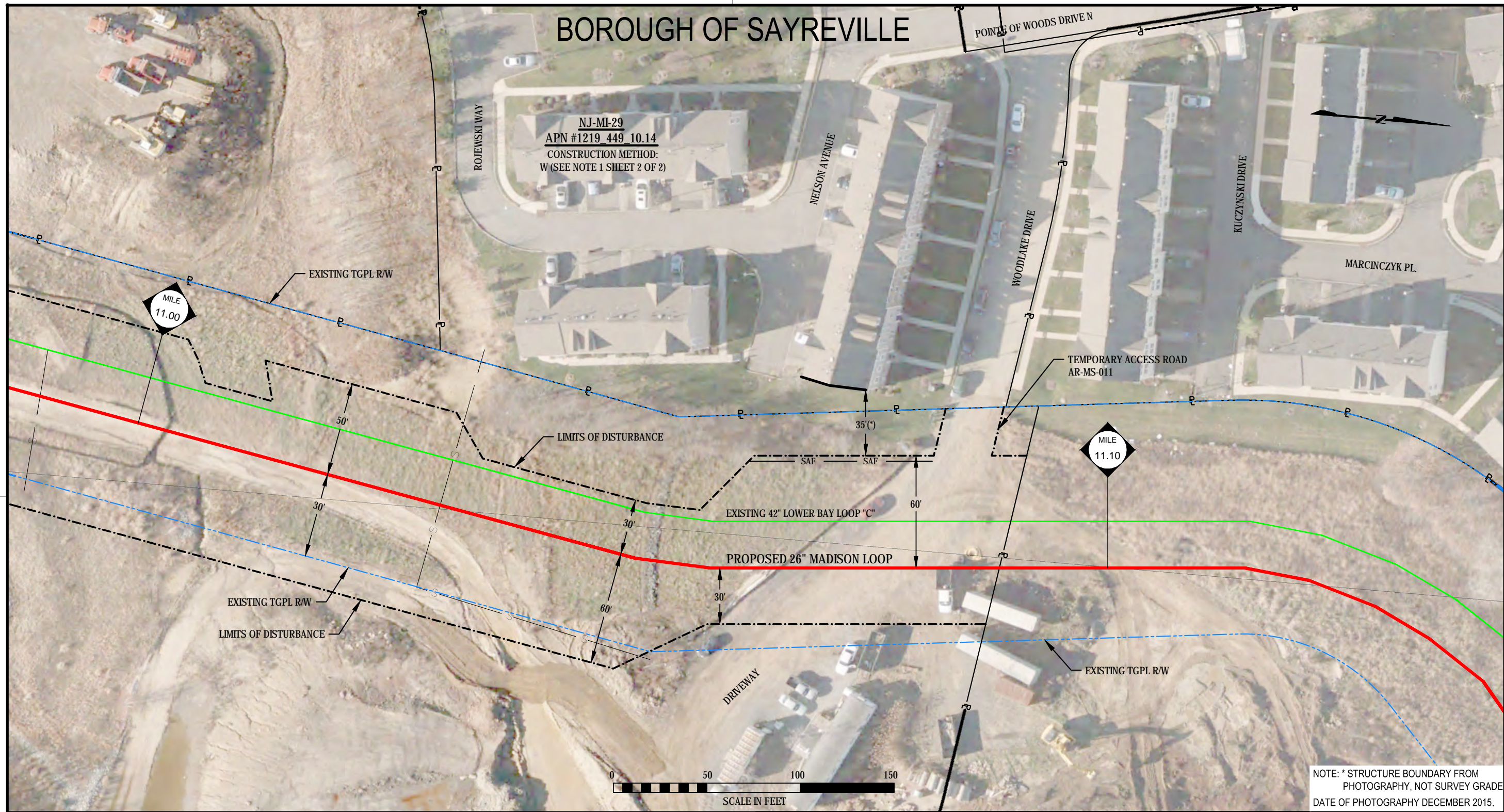
TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
FOR THE PROPERTY OF TRACT NO. NJ-MI-17
BOROUGH OF SAYREVILLE
MIDDLESEX COUNTY, NEW JERSEY

DRAWN BY: FH	DATE: 12/20/16	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 12/27/16	ISSUED FOR CONSTRUCTION:	REVISION: 1
APPROVED BY: EL	DATE: 01/09/17	DRAWING NUMBER: 24-0100-80-06D-B/10.41-01	SHEET 1 OF 2
WO: 1185727	ROUTE ID: 311 CIVIL: 03/09/18 LAND: 12/18/17 ENV: 05/04/17	4/17/2018 K:\MAPPING\VA\ATV\LOOP\0857_16\ACQUISITION\06D-RCP\Draw\24-0100-80-06D-BL10.41-01.dwg	

BOROUGH OF SAYREVILLE

NJ-MI-29
APN #1219 449 10.14
CONSTRUCTION METHOD:
W (SEE NOTE 1 SHEET 2 OF 2)

G-8

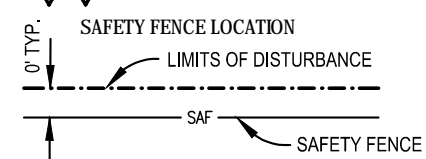


LEGEND

- PROPOSED 26" MADISON LOOP
- EXISTING 42" LOWER BAY LOOP "C"
- EXISTING TGPL R/W
- PROPOSED TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- UTILITY EASEMENT
- LIMITS OF DISTURBANCE
- CONSTRUCTION SAFETY FENCE
- WETLAND AREA
- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- SANITARY SEWER
- WATER LINE
- CABLE LINE
- OVERHEAD POWER LINE
- POWER POLE



MUSTANG OF NEW JERSEY



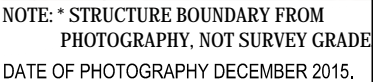
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1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185727	W. MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
FOR THE PROPERTY OF TRACT NO. NJ-MI-29
BOROUGH OF SAYREVILLE
MIDDLESEX COUNTY, NEW JERSEY

DRAWN BY: FH	DATE: 12/20/16	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 12/27/16	ISSUED FOR CONSTRUCTION:	REVISION: 1
APPROVED BY: EL	DATE: 01/09/17	DRAWING NUMBER: 24-0100-80-06D-B_11.05-01	SHEET 1 OF 2
WO: 1185727	ROUTE ID: 311 CIVIL: 03/09/18 LAND: 12/18/17 ENV: 05/04/17	4/16/2018 K:\MAPPING\VA\VA\LOOP\0857_16\ACQUISITION\0857-16-0100-80-06D-B_11.05-01.dwg	

G-9

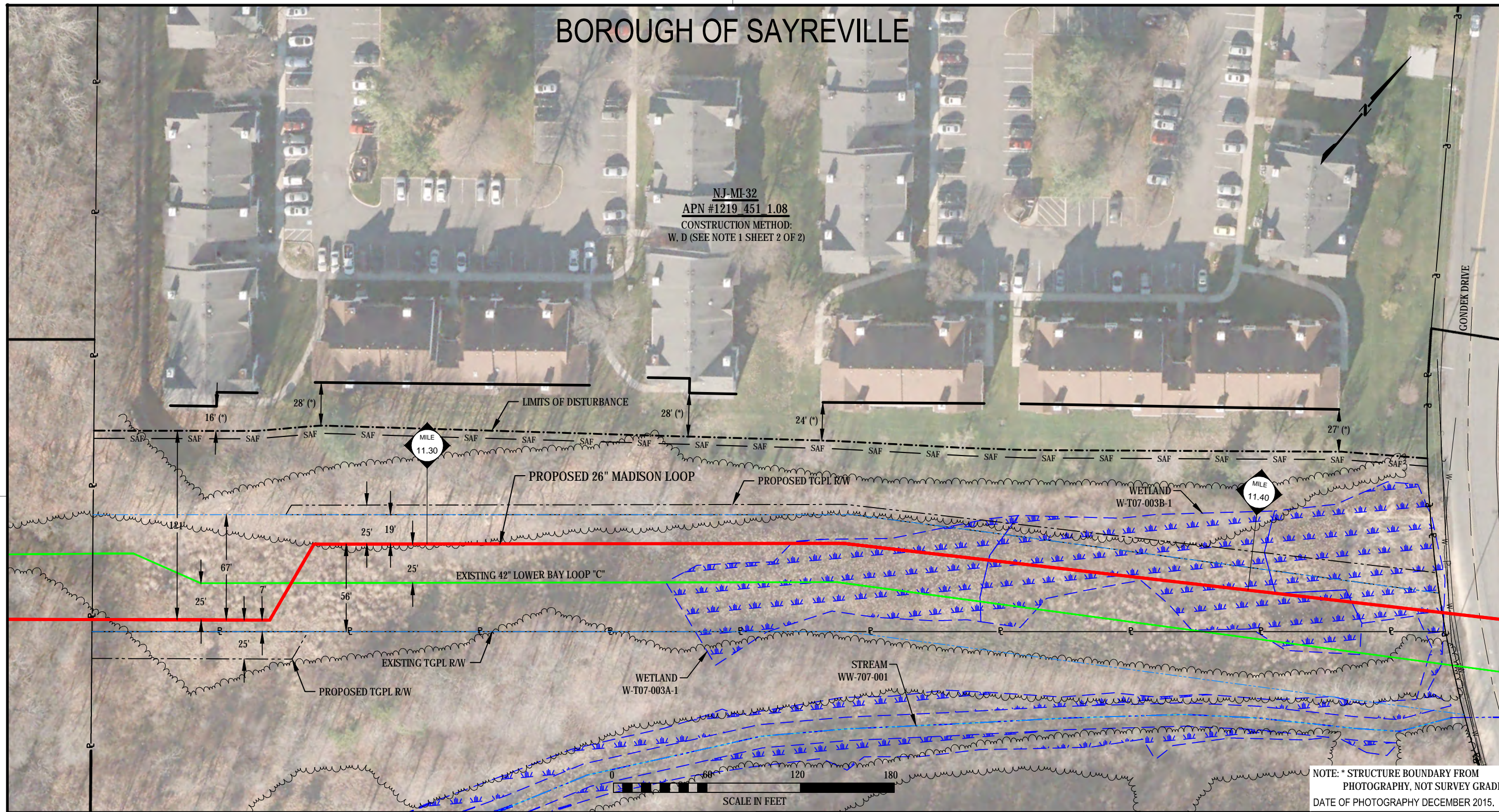


<div><div>LEGEND</div><div><div><div><div><div></div></div><div>PROPOSED 26" MADISON LOOP</div></div><div><div><div></div></div><div>EXISTING 42" LOWER BAY LOOP "C"</div></div><div><div><div></div></div><div>EXISTING TGPL R/W</div></div><div><div><div></div></div><div>PROPOSED TGPL R/W</div></div><div><div><div></div></div><div>PROPERTY LINE</div></div><div><div><div></div></div><div>ROAD EASEMENT</div></div><div><div><div></div></div><div>UTILITY EASEMENT</div></div><div><div><div></div></div><div>LIMITS OF DISTURBANCE</div></div><div><div><div></div></div><div>CONSTRUCTION SAFETY FENCE</div></div><div><div><div></div></div><div>WETLAND AREA</div></div></div><div><div><div></div></div><div>STREAM CROSSING</div></div><div><div><div></div></div><div>RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION</div></div><div><div><div></div></div><div>SINGLE TREE</div></div><div><div><div></div></div><div>TREE LINE</div></div><div><div><div></div></div><div>EXISTING FENCE</div></div><div><div><div></div></div><div>SANITARY SEWER</div></div><div><div><div></div></div><div>WATER LINE</div></div><div><div><div></div></div><div>CABLE LINE</div></div><div><div><div></div></div><div>OVERHEAD POWER LINE</div></div><div><div><div></div></div><div>POWER POLE</div></div></div></div>		<div><div><div><div></div></div><div>MUSTANG OF NEW JERSEY</div></div><div><div><div><div></div></div><div>SAFETY FENCE LOCATION</div></div><div><div><div></div></div><div>LIMITS OF DISTURBANCE</div></div><div><div><div></div></div><div>SAF</div></div><div><div><div></div></div><div>SAFETY FENCE</div></div></div><div><div><div></div></div><div>THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.</div></div></div>
<div><div><div><div>DRAWING NO.</div><div>NO.</div></div><div><div>DATE</div><div>03/20/17</div></div><div><div>BY</div><div>FH</div></div><div><div>REVISION DESCRIPTION</div><div>ISSUED FOR FERC FILING</div></div><div><div>W.O. NO.</div><div>1185727</div></div><div><div>CHK.</div><div>CLR</div></div><div><div>APP.</div><div>MJH</div></div></div><div><div><div>REFERENCE TITLE</div><div>TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC RESIDENTIAL CONSTRUCTION PLAN NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP FOR THE PROPERTY OF TRACT NO. NJ-MI-30 BOROUGH OF SAYREVILLE MIDDLESEX COUNTY, NEW JERSEY</div></div><div><div><div><div><div>DRAWN BY: FH</div><div>CHECKED BY: ELR</div><div>APPROVED BY: EL</div><div>WO: 1185727</div></div><div><div><div>DATE: 12/20/16</div><div>DATE: 12/27/16</div><div>DATE: 01/09/17</div><div>ROUTE ID: 311 CIVIL: 03/09/18 LAND: 12/18/17 ENV: 05/04/17</div></div><div><div><div>ISSUED FOR BID:</div><div>ISSUED FOR CONSTRUCTION:</div><div>DRAWING NUMBER: 24-0100-80-06D-B/11.10-01</div><div>4/16/2018 K:\MAPPING\NJ\LAT\LOOP\0857_16\ACQUISITION\06D-RCPL\24-0100-80-06D-B_11.10-01.dwg</div></div><div><div>SCALE: 1" = 50'</div><div>REVISION: 1</div><div>SHEET 1 OF 2</div></div></div></div></div></div></div></div></div>		

BOROUGH OF SAYREVILLE

NJ-MI-32
APN #1219 451 1.08
CONSTRUCTION METHOD:
W, D (SEE NOTE 1 SHEET 2 OF 2)

G-10



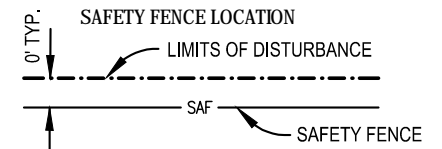
NOTE: * STRUCTURE BOUNDARY FROM PHOTOGRAPHY, NOT SURVEY GRADE
DATE OF PHOTOGRAPHY DECEMBER 2015.

LEGEND

- PROPOSED 26" MADISON LOOP
- EXISTING 42" LOWER BAY LOOP "C"
- EXISTING TGPL R/W
- PROPOSED TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- UTILITY EASEMENT
- LIMITS OF DISTURBANCE
- CONSTRUCTION SAFETY FENCE
- SAF
- WETLAND AREA
- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- SANITARY SEWER
- WATER LINE
- CABLE LINE
- OVERHEAD POWER LINE
- POWER POLE



MUSTANG OF NEW JERSEY



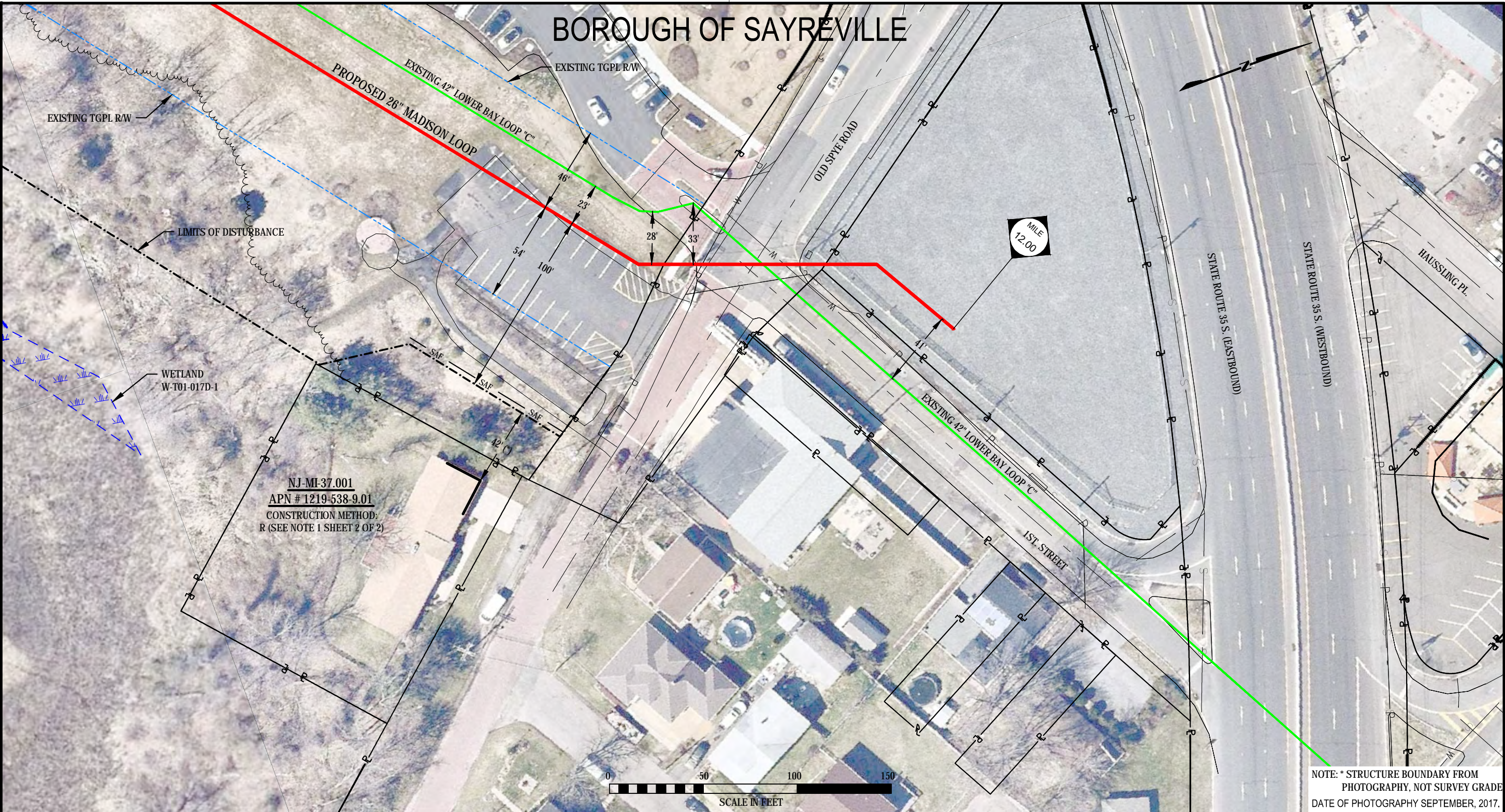
THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE	
NO.	DATE	BY	REVISION DESCRIPTION
0	05/10/18	FH	ISSUED FOR FERC SUPPLEMENTAL #6

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
FOR THE PROPERTY OF TRACT NO. NJ-MI-32
BOROUGH OF SAYREVILLE
MIDDLESEX COUNTY, NEW JERSEY

DRAWN BY: FH	DATE: 05/10/18	ISSUED FOR BID:	SCALE: 1" = 60'
CHECKED BY: ELR	DATE: 05/10/18	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: EL	DATE: 05/10/18	DRAWING NUMBER: 24-0100-80-06D-B/11.30-01	SHEET 1 OF 2
WO: 1185727	ROUTE ID: 311 CIVIL: 03/09/18 LAND: 12/18/17 ENV: 05/04/17	4/24/2018 K:\MAPPING\VA\VA\LOOP\0857_16\ACQUISITION\08D-RCP\DWG\24-0100-80-06D-B-11.30-01.dwg	

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DRAWING NO.		REFERENCE TITLE	

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
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1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185727	W.	MJH

DRAWN BY:	DATE:	ISSUED FOR BID:	SCALE:
THL	12/20/16		1" = 50'
CHECKED BY:	DATE:	ISSUED FOR CONSTRUCTION:	REVISION:
ELR	12/27/16		1
APPROVED BY:	DATE:	DRAWING NUMBER:	SHEET
EL	01/09/17	24-0100-80-06D-B/11.95-01	1
WO: 1185727	ROUTE ID: 311 CIVIL: 03/09/18 LAND: 12/18/17 ENV: 05/04/17	4/16/2018 R:\MAPPING\VA\LAT\LOOP\0857_16\ACQUISITION\06D-RCP\DWG\24-0100-80-06D-B_11.95-01.dwg	OF 2

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 26" MADISON LOOP
FOR THE PROPERTY OF TRACT NO. NJ-MI-37.001
BOROUGH OF SAYREVILLE
MIDDLESEX COUNTY, NEW JERSEY

William's

LEGEND

SYMBOL	DESCRIPTION
— (Red)	PROPOSED 26" MADISON LOOP
— (Green)	EXISTING 42" LOWER BAY LOOP "C"
— (Blue)	EXISTING TGPL R/W
— (Dashed Blue)	PROPOSED TGPL R/W
— (Thin Black)	PROPERTY LINE
— (Thick Black)	ROAD EASEMENT
— (Dashed Black)	UTILITY EASEMENT
— (Dotted Black)	LIMITS OF DISTURBANCE
— (Black with SAF)	CONSTRUCTION SAFETY FENCE
— (Blue with W)	WETLAND AREA
— (Hatched)	STREAM CROSSING
— (Black with S)	RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
— (Black with T)	SINGLE TREE
— (Black with L)	TREE LINE
— (Black with X)	EXISTING FENCE
— (Black with S)	SANITARY SEWER
— (Black with W)	WATER LINE
— (Black with C)	CABLE LINE
— (Black with P)	OVERHEAD POWER LINE
— (Black with O)	POWER POLE
























MUSTANG OF NEW JERSEY

0' TYP. SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

SAF SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

LEGEND  PROPOSED 26" MADISON LOOP  EXISTING 42" LOWER BAY LOOP "C"  EXISTING TGPL R/W  PROPOSED TGPL R/W  PROPERTY LINE  ROAD EASEMENT  UTILITY EASEMENT  LIMITS OF DISTURBANCE  CONSTRUCTION SAFETY FENCE  WETLAND AREA  STREAM CROSSING  RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION  SINGLE TREE  TREE LINE  EXISTING FENCE  SANITARY SEWER  WATER LINE  CABLE LINE  OVERHEAD POWER LINE  POWER POLE		 MUSTANG OF NEW JERSEY  0' TYP. SAFETY FENCE LOCATION LIMITS OF DISTURBANCE SAFETY FENCE SAF		DRAWING NO. 		REFERENCE TITLE 		TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC RESIDENTIAL CONSTRUCTION PLAN NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 26" MADISON LOOP FOR THE PROPERTY OF TRACT NO. NJ-MI-39.003 BOROUGH OF SAYREVILLE MIDDLESEX COUNTY, NEW JERSEY																		
<table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>BY</th> <th>REVISION DESCRIPTION</th> <th>W.O. NO.</th> <th>CHK.</th> <th>APP.</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>03/20/17</td> <td>FH</td> <td>ISSUED FOR FERC FILING</td> <td>1185727</td> <td>CLR W.</td> <td>MJH MJH</td> </tr> <tr> <td>1</td> <td>05/10/18</td> <td>MH</td> <td>ISSUED FOR FERC SUPPLEMENTAL #6</td> <td>1185727</td> <td></td> <td></td> </tr> </tbody> </table>		NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	0	03/20/17	FH	ISSUED FOR FERC FILING	1185727	CLR W.	MJH MJH	1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185727			THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.		DRAWN BY: FH DATE: 12/20/16 ISSUED FOR BID: SCALE: 1" = 50' CHECKED BY: ELR DATE: 12/27/16 ISSUED FOR CONSTRUCTION: REVISION: 1 APPROVED BY: EL DATE: 01/09/17 DRAWING NUMBER: 24-0100-80-06D-B/11.98-01 SHEET 1 WO: 1185727 ROUTE ID: 311 CIVIL: 03/09/18 4/16/2018 Mark Ho OF 2 LAND: 12/18/17 ENV: 05/04/17 K:\MAPPING\NJ\16\ACQUISITION\060-RCF\DWG\24-0100-80-06D-B_11.98-01.dwg	
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.																				
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1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185727																						



DATE OF PHOTOGRAPHY SEPTEMBER 2016.

LEGEND

PROPOSED 26" MADISON LOOP

EXISTING 42" LOWER BAY LOOP "C"

EXISTING TGPL R/W

PROPOSED TGPL R/W

PROPERTY LINE

ROAD EASEMENT

UTILITY EASEMENT

LIMITS OF DISTURBANCE

SAF

CONSTRUCTION SAFETY FENCE

WETLAND AREA

STREAM CROSSING

RESIDENTIAL STRUCTURE
WITHIN 50' OF CONSTRUCTION

SINGLE TREE

TREE LINE

EXISTING FENCE

SANITARY SEWER

WATER LINE

CABLE LINE

OVERHEAD POWER LINE

POWER POLE

MUSTANG OF NEW JERSEY

SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

SAF

SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185727	W.	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC

RESIDENTIAL CONSTRUCTION PLAN

NORTHEAST SUPPLY ENHANCEMENT PROJECT

PROPOSED 26" MADISON LOOP

FOR THE PROPERTY OF TRACT NO. NJ-MI-39.005.CY

OLD BRIDGE TOWNSHIP

MIDDLESEX COUNTY, NEW JERSEY

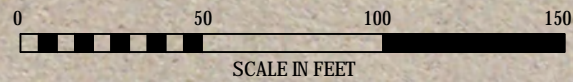
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CHECKED BY: W.	DATE: 04/13/18	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: EL	DATE: 04/14/18	DRAWING NUMBER: 24-0100-80-06D-B/12.01-01	SHEET 1
WO: 1185727	ROUTE ID: 311 CIVIL: 03/09/18 LAND: 12/18/17 ENV: 05/04/17	4/13/2018 R:\MAPPING\NA\ATV\LOOP\0857_16\ACQUISITION\0857-16-0100-80-06D-B_12.01-01.dwg	Mark Ho OF 2

PA-LA-15
APN #1705477200000
CONSTRUCTION METHOD:
W (SEE NOTE 1 SHEET 2 OF 2)











MILE
1682.50












MILE
1682.60

DATE OF PHOTOGRAPHY DECEMBER , 2015.



LEGEND

-  PROPOSED 42" QUARRYVILLE LOOP
 EXISTING 30" TGPL MAINLINE "A"
 EXISTING 30" TGPL MAINLINE "B"
 EXISTING 36" TGPL MAINLINE "C"
 PROPOSED TGPL R/W
 EXISTING TGPL R/W
 PROPERTY LINE
 ROAD EASEMENT
 LIMITS OF DISTURBANCE
 WETLAND AREA


- | | |
|---|---|
|  | CONSTRUCTION SAFETY FENCE |
|  | STREAM CROSSING |
|  | RESIDENTIAL STRUCTURE
WITHIN 50' OF CONSTRUCTION |
|  | SINGLE TREE |
|  | TREE LINE |
|  | EXISTING FENCE |
|  | SANITARY SEWER |
|  | WATER LINE |
|  | CABLE LINE |
|  | OVERHEAD POWER LINE |
|  | POWER POLE |

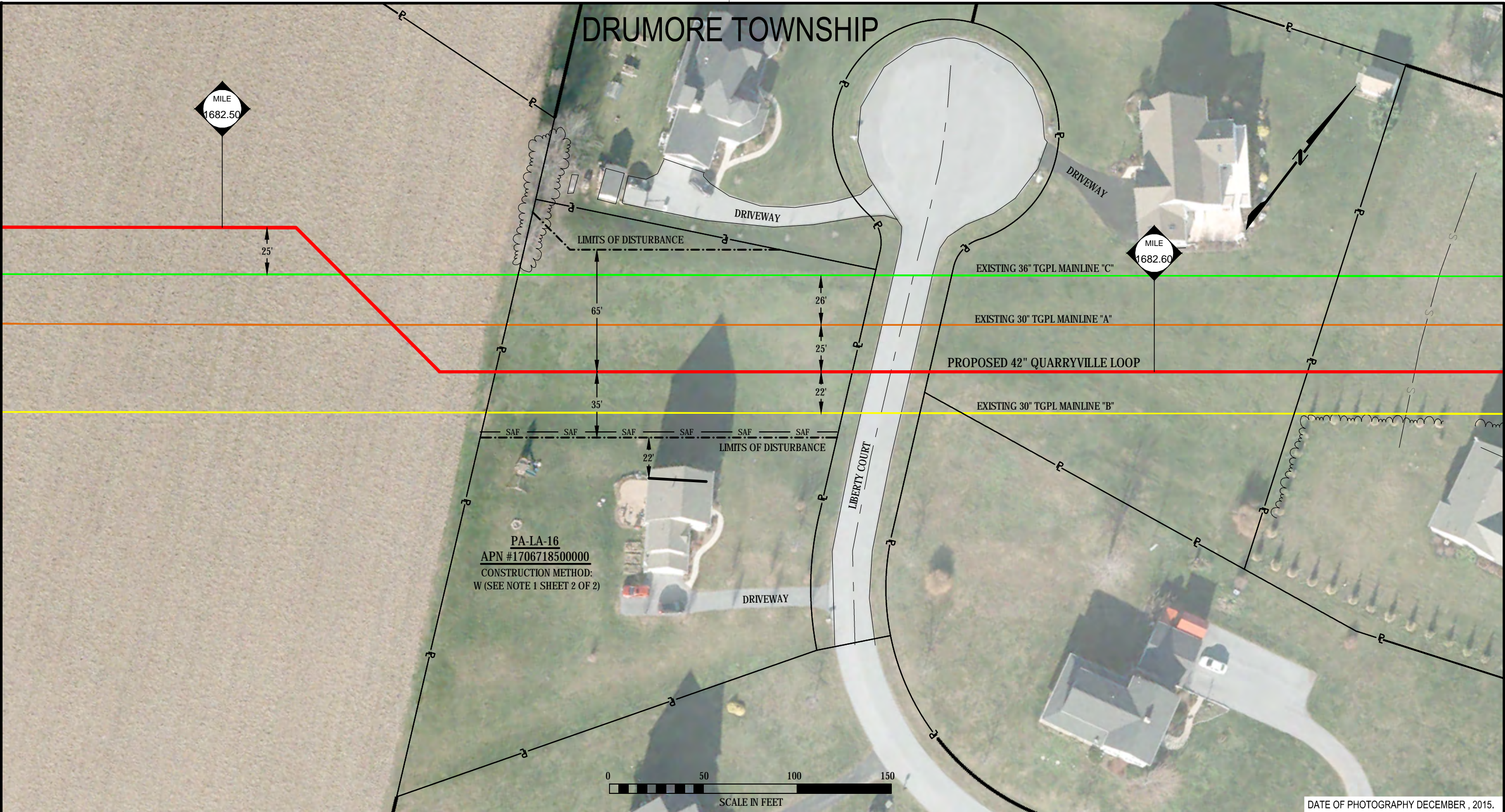


**WOOD GROUP
USA, INC.**

Diagram illustrating the relationship between the Safety Fence Location, Limits of Disturbance, and the Safety Fence. The diagram shows a horizontal line representing the ground surface. A dashed line above it is labeled "LIMITS OF DISTURBANCE". A solid line below it is labeled "SAF". A vertical arrow points from the "LIMITS OF DISTURBANCE" line down to the "SAF" line, labeled "0' TYP.". A curved arrow points from the "SAF" line to the "SAFETY FENCE" label.

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.			REFERENCE TITLE				TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC RESIDENTIAL CONSTRUCTION PLAN NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP FOR THE PROPERTY OF TRACT NO. PA-LA-15 DRUMORE TOWNSHIP LANCASTER COUNTY, PENNSYLVANIA					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	DRAWN BY: MH	DATE: 12/20/16	ISSUED FOR BID:	SCALE: 1" = 50'		
0 1	03/20/17 05/10/18	MH MH	ISSUED FOR FERC FILING ISSUED FOR FERC SUPPLEMENTAL #6	1185726 1185726	CLR W.	MJH MJH	CHECKED BY: ELR	DATE: 12/27/16	ISSUED FOR CONSTRUCTION:	REVISION: 1		
							APPROVED BY: EL	DATE: 01/09/17	DRAWING NUMBER: 26-0100-70-06D-D/1682.55-01		SHEET 1	
							WO: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 1253m 4/5/2018 LAND: 01/15/18 ENV: 01/05/17 K:\MAPPING\PA\MAIN\LOOP\1681_16\ACQUISITION\06D-RCP\DWG\26-0100-70-06D-D-1682.55-01.dwg freddy.huerta				of 2



DATE OF PHOTOGRAPHY DECEMBER, 2015.

LEGEND

PROPOSED 42" QUARRYVILLE LOOP

EXISTING 30" TGPL MAINLINE "A"

EXISTING 30" TGPL MAINLINE "B"

EXISTING 36" TGPL MAINLINE "C"

PROPOSED TGPL R/W

EXISTING TGPL R/W

PROPERTY LINE

ROAD EASEMENT

LIMITS OF DISTURBANCE

WETLAND AREA

SAF

CONSTRUCTION SAFETY FENCE

STREAM CROSSING

RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION

SINGLE TREE

TREE LINE

EXISTING FENCE

SANITARY SEWER

WATER LINE

CABLE LINE

OVERHEAD POWER LINE

POWER POLE

SAF

SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

SAF

SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

WOOD GROUP USA, INC.

NO.

DATE

BY

REVISION DESCRIPTION

W.O. NO.

CHK.

APP.

0

03/20/17

MH

ISSUED FOR FERC FILING

1185726

CLR

MJH

1

05/10/18

MH

ISSUED FOR FERC SUPPLEMENTAL #6

1185726

W.

MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC

RESIDENTIAL CONSTRUCTION PLAN

NORTHEAST SUPPLY ENHANCEMENT PROJECT

PROPOSED 42" QUARRYVILLE LOOP

FOR THE PROPERTY OF TRACT NO. PA-LA-16

DRUMMORE TOWNSHIP

LANCASTER COUNTY, PENNSYLVANIA

William's

DRAWN BY: MH

DATE: 12/20/16

ISSUED FOR BID:

SCALE: 1" = 50'

CHECKED BY: ELR

DATE: 12/27/16

ISSUED FOR CONSTRUCTION:

REVISION: 1

APPROVED BY: EL

DATE: 01/09/17

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SHEET 1

WO: 1185726

ROUTE ID: 109 CIVIL: 01/08/18

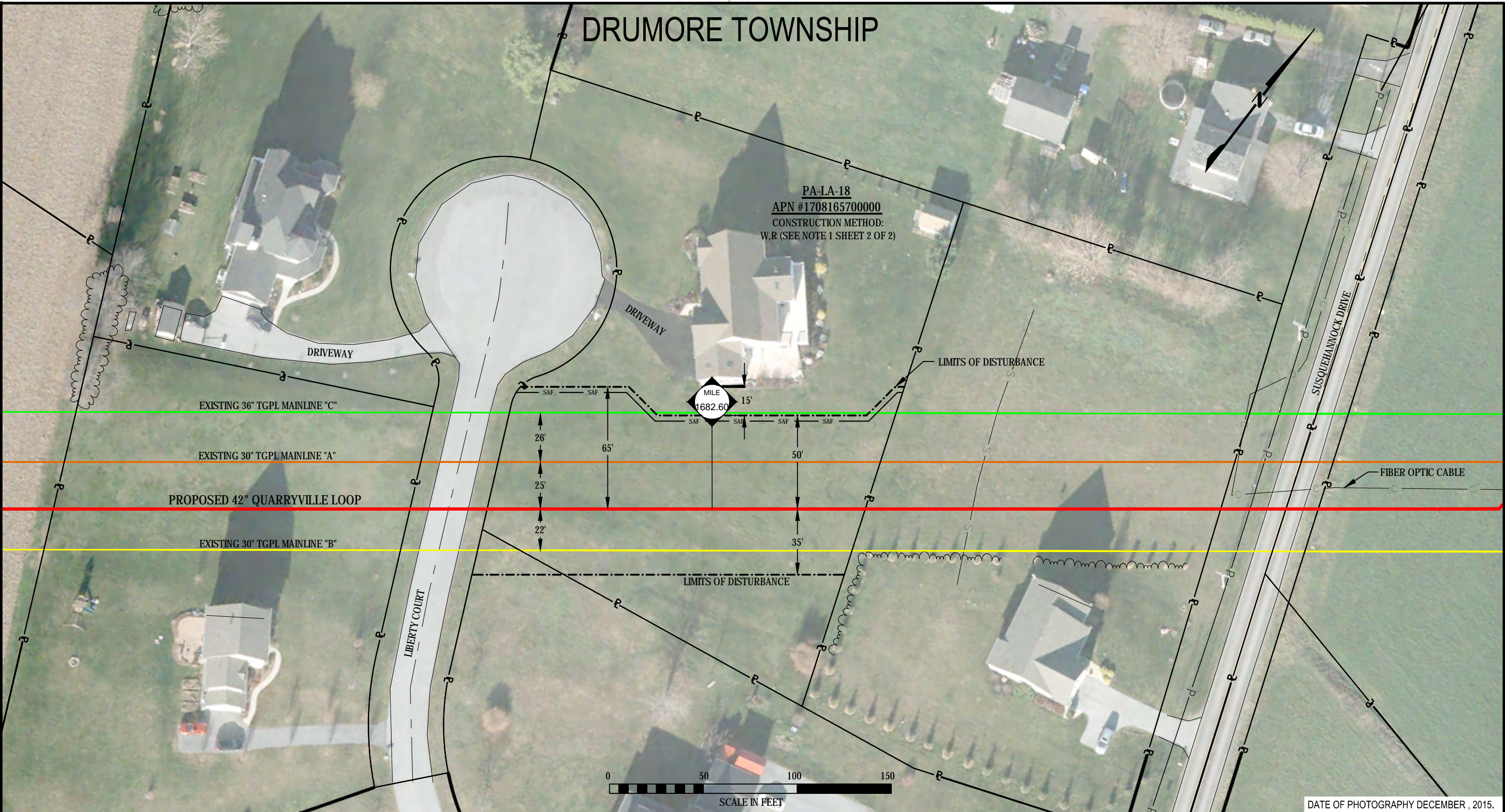
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4/5/2018

freddy.huerta

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OF 2



LEGEND

- PROPOSED 42" QUARRYVILLE LOOP
- EXISTING 30" TGPL MAINLINE "A"
- EXISTING 30" TGPL MAINLINE "B"
- EXISTING 36" TGPL MAINLINE "C"
- PROPOSED TGPL R/W
- EXISTING TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- LIMITS OF DISTURBANCE
- WETLAND AREA

- SAF CONSTRUCTION SAFETY FENCE
- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- S SANITARY SEWER
- W WATER LINE
- C CABLE LINE
- P OVERHEAD POWER LINE
- O POWER POLE

**WOOD GROUP
USA, INC.**

0' TYP.

SAF SAFETY FENCE

LIMITS OF DISTURBANCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

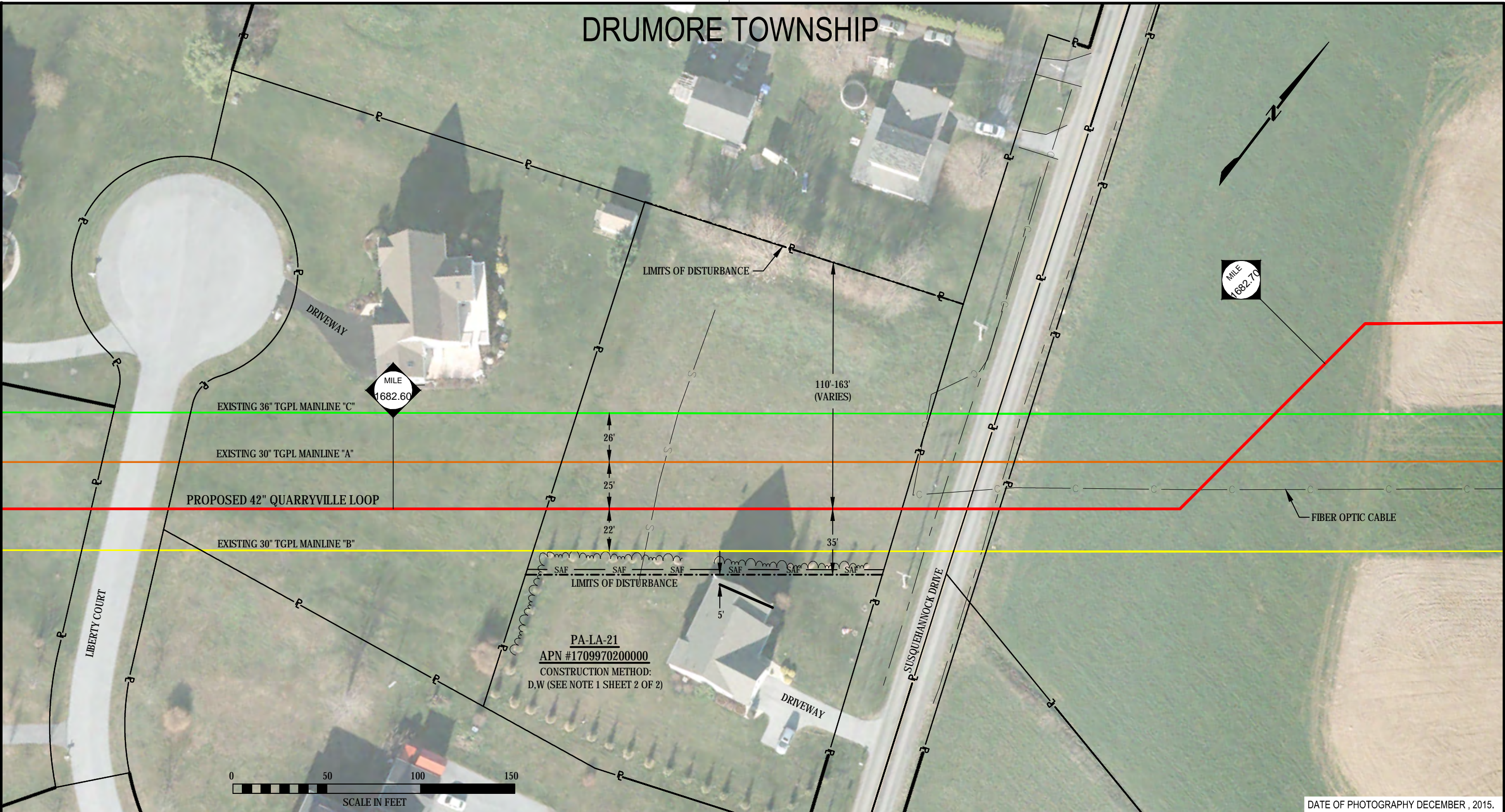
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-18
DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	03/20/17	MH	ISSUED FOR FERC FILING	1185726	CLR	MJH
1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH

DRAWN BY: MH	DATE: 12/20/16	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 12/27/16	ISSUED FOR CONSTRUCTION:	REVISION: 1
APPROVED BY: EL	DATE: 01/09/17	DRAWING NUMBER: 26-0100-70-06D-D/1682.60-01	SHEET 1 OF 2
WO: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17	4/5/2018 3:30pm fredy.huerta K:\MAPPING\PA\MAIN\LOOP\1681_16\ACQUISITION\06D-RCPL\dwg\26-0100-70-06D-D_1682.60-01.dwg	

G-17



DATE OF PHOTOGRAPHY DECEMBER, 2015.

LEGEND									
	PROPOSED 42" QUARRYVILLE LOOP		CONSTRUCTION SAFETY FENCE						
	EXISTING 30" TGPL MAINLINE "A"		STREAM CROSSING						
	EXISTING 30" TGPL MAINLINE "B"		RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION						
	EXISTING 36" TGPL MAINLINE "C"		SINGLE TREE						
	PROPOSED TGPL R/W		TREE LINE						
	EXISTING TGPL R/W		EXISTING FENCE						
	PROPERTY LINE		SANITARY SEWER						
	ROAD EASEMENT		WATER LINE						
	LIMITS OF DISTURBANCE		CABLE LINE						
	WETLAND AREA		OVERHEAD POWER LINE						
			POWER POLE						

WOOD GROUP USA, INC.

SAFETY FENCE LOCATION

0' TYP.

LIMITS OF DISTURBANCE

SAF SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

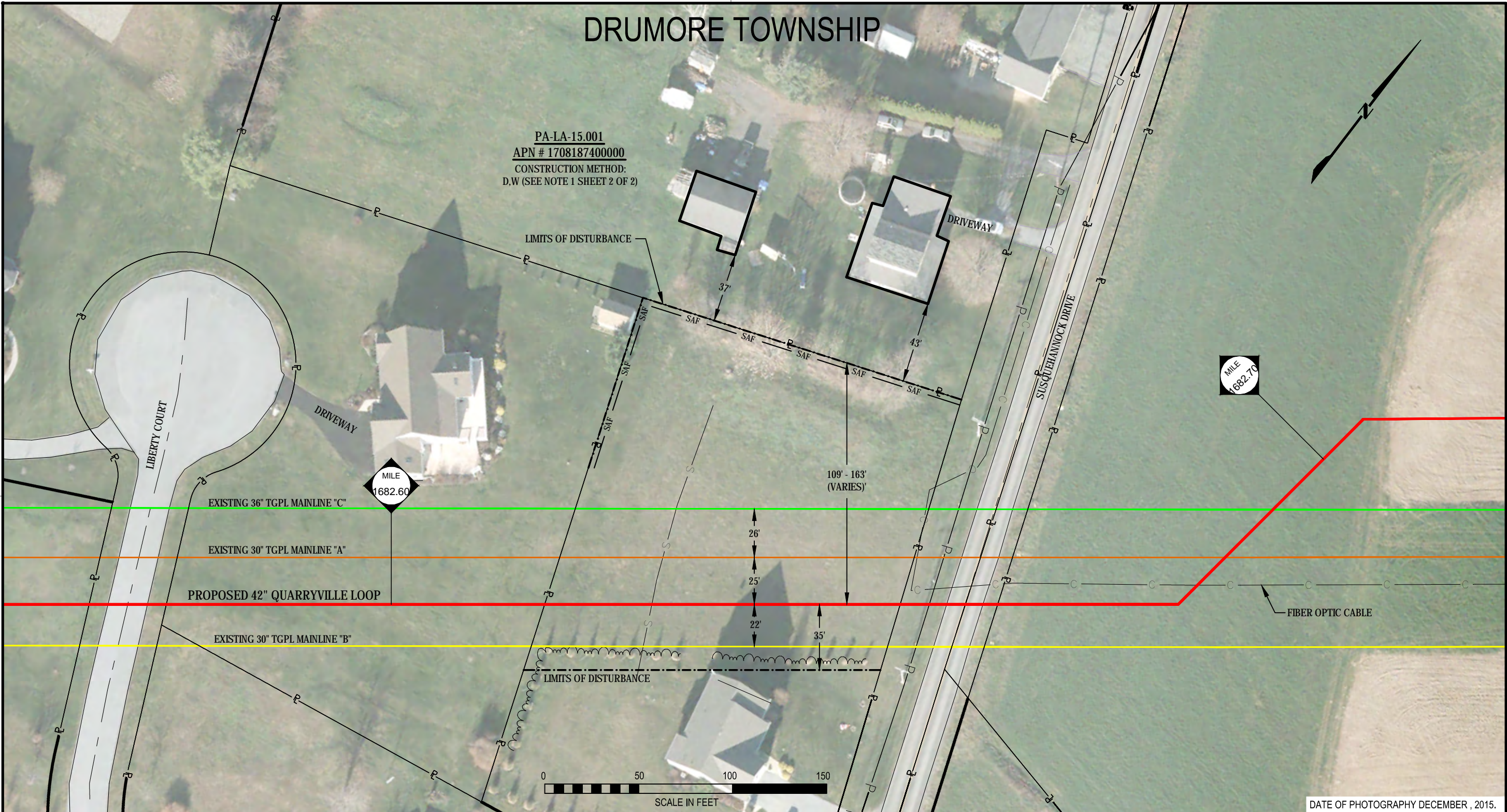
DRAWING NO.		REFERENCE TITLE	

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	03/20/17	MH	ISSUED FOR FERC FILING	1185726	CLR	MJH
1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC RESIDENTIAL CONSTRUCTION PLAN NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP FOR THE PROPERTY OF TRACT NO. PA-LA-21 DRUMORE TOWNSHIP LANCASTER COUNTY, PENNSYLVANIA				Williams	
DRAWN BY: MH		DATE: 12/20/16		ISSUED FOR BID:	
CHECKED BY: ELR		DATE: 12/27/16		ISSUED FOR CONSTRUCTION:	
APPROVED BY: EL		DATE: 01/09/17		DRAWING NUMBER: 26-0100-70-06D-D/1682.63-01	
WO: 1185726		ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17		SHEET 1 OF 2	

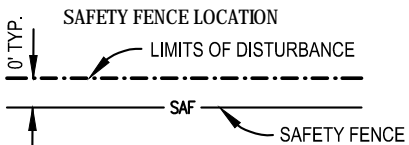
DRUMORE TOWNSHIP

PA-LA-15.001
APN # 1708187400000
CONSTRUCTION METHOD:
D,W (SEE NOTE 1 SHEET 2 OF 2)



LEGEND

- | | | | |
|--|--------------------------------|--|--|
| | PROPOSED 42" QUARRYVILLE LOOP | | CONSTRUCTION SAFETY FENCE |
| | EXISTING 30" TGPL MAINLINE "A" | | STREAM CROSSING |
| | EXISTING 30" TGPL MAINLINE "B" | | RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION |
| | EXISTING 36" TGPL MAINLINE "C" | | SINGLE TREE |
| | PROPOSED TGPL R/W | | TREE LINE |
| | EXISTING TGPL R/W | | EXISTING FENCE |
| | PROPERTY LINE | | SANITARY SEWER |
| | ROAD EASEMENT | | WATER LINE |
| | LIMITS OF DISTURBANCE | | CABLE LINE |
| | WETLAND AREA | | OVERHEAD POWER LINE |
| | | | POWER POLE |

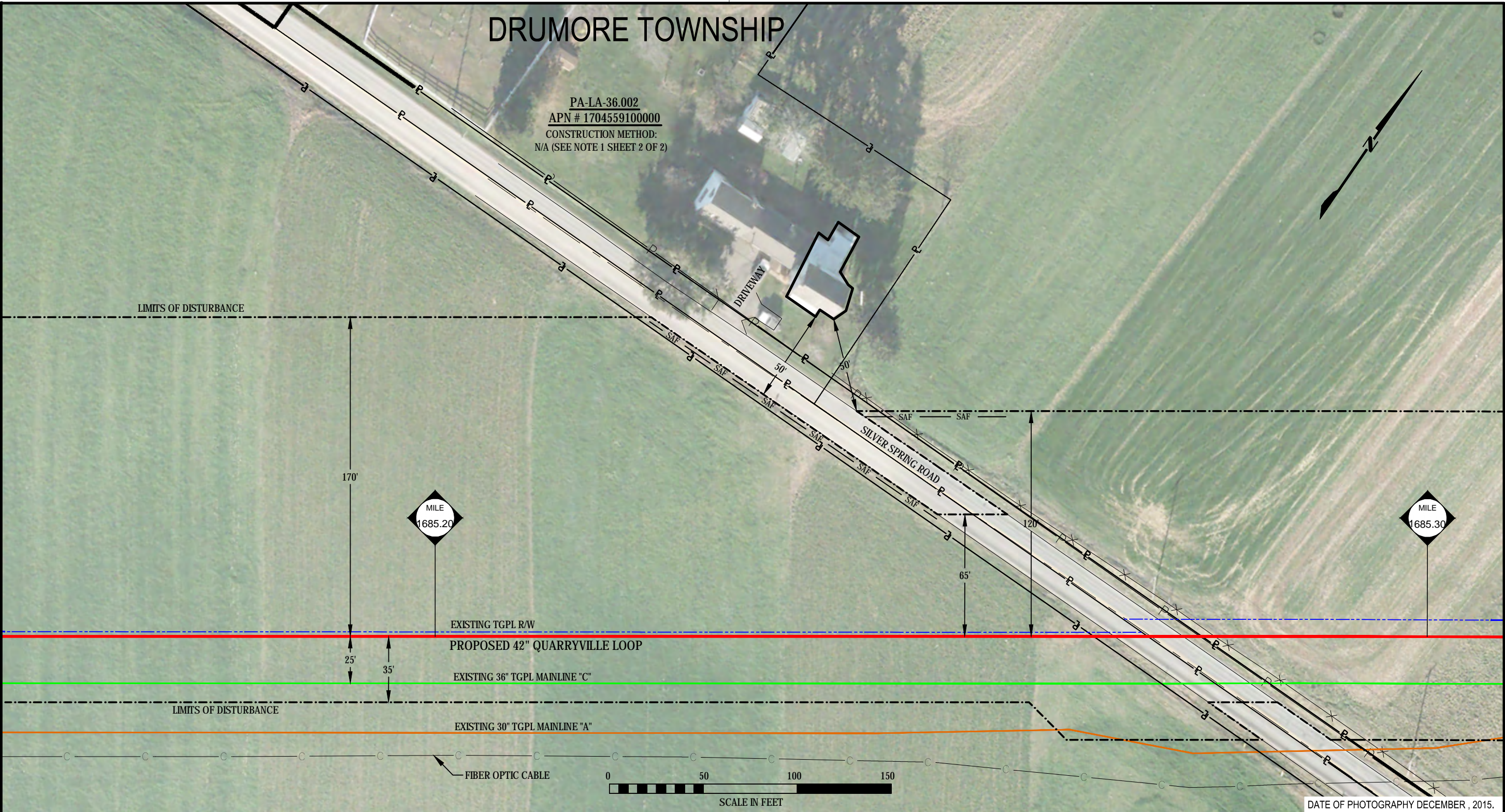


THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE	
NO.	DATE	BY	REVISION DESCRIPTION
0	03/20/17	MH	ISSUED FOR FERC FILING
1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6
W.O. NO.	CHK.	APP.	
1185726	CLR	MJH	
1185726	W.	MJH	
DRAWN BY: MH DATE: 12/20/16 ISSUED FOR BID: SCALE: 1" = 50'			
CHECKED BY: ELR DATE: 12/27/16 ISSUED FOR CONSTRUCTION: REVISION: 1			
APPROVED BY: EL DATE: 01/09/17 DRAWING NUMBER: 26-0100-70-06D-D/1682.64-01 SHEET 1			
WO: 1185726 ROUTE ID: 109 CIVIL: 01/08/18 1:22pm LAND: 01/15/18 ENV: 01/05/17 4/5/2018 fredy.huerta R:\MAPPING\PA\MAIN\LOOP\1681_16\ACQUISITION\06D-RCPL\dwg\26-0100-70-06D-D_1682.64-01.dwg OF 2			

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-15.001
DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA





DATE OF PHOTOGRAPHY DECEMBER, 2015.

LEGEND

- PROPOSED 42" QUARRYVILLE LOOP
- EXISTING 30" TGPL MAINLINE "A"
- EXISTING 30" TGPL MAINLINE "B"
- EXISTING 36" TGPL MAINLINE "C"
- PROPOSED TGPL R/W
- EXISTING TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- LIMITS OF DISTURBANCE
- WETLAND AREA

- SAF CONSTRUCTION SAFETY FENCE
- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- S SANITARY SEWER
- W WATER LINE
- C CABLE LINE
- P OVERHEAD POWER LINE
- POWER POLE

**WOOD GROUP
USA, INC.**

0' TYP.

SAF SAFETY FENCE LOCATION

SAF SAFETY FENCE

LIMITS OF DISTURBANCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE	

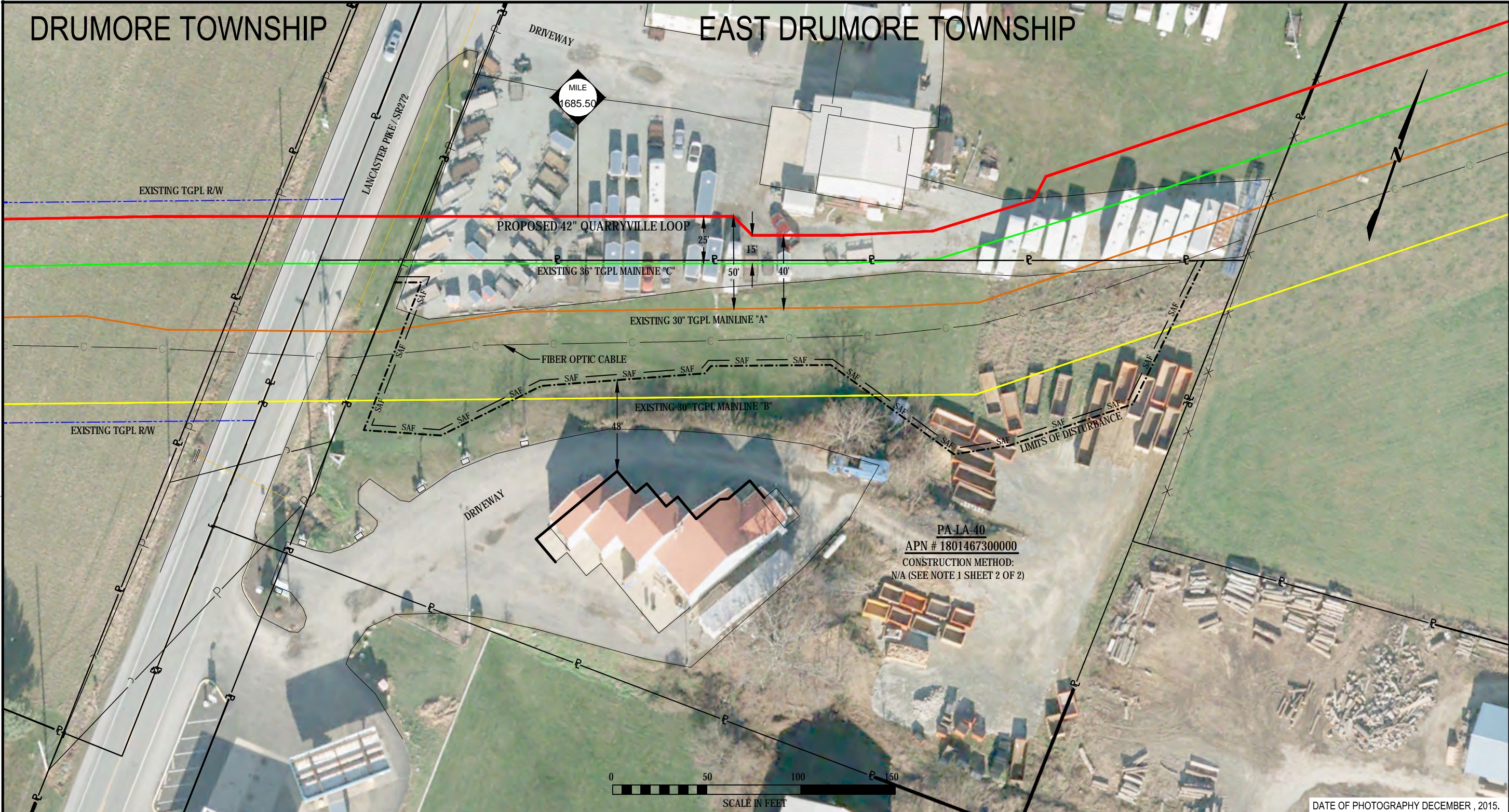
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1	06/01/17	MH	ISSUED FOR SUPPLEMENTAL #1	1185726	CLR	MJH
2	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-36.002
DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA

DRAWN BY: MH	DATE: 12/20/16	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 12/27/16	ISSUED FOR CONSTRUCTION:	REVISION: 2
APPROVED BY: EL	DATE: 01/09/17	DRAWING NUMBER: 26-0100-70-06D-D/1685.24-01	SHEET 1 OF 2
WO: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17	4/5/2018 freddy.huerta K:\MAPPING\PA\MAIN\LOOP\1685_16\ACQUISITION\06D-RCPL\dwg\26-0100-70-06D-D_1685.24-01.dwg	

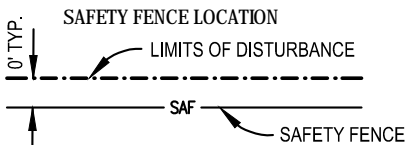
DRUMORE TOWNSHIP

EAST DRUMORE TOWNSHIP



LEGEND

- | | | | |
|--|--------------------------------|--|--|
| | PROPOSED 42" QUARRYVILLE LOOP | | CONSTRUCTION SAFETY FENCE |
| | EXISTING 30" TGPL MAINLINE "A" | | STREAM CROSSING |
| | EXISTING 30" TGPL MAINLINE "B" | | RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION |
| | EXISTING 36" TGPL MAINLINE "C" | | SINGLE TREE |
| | PROPOSED TGPL R/W | | TREE LINE |
| | EXISTING TGPL R/W | | EXISTING FENCE |
| | PROPERTY LINE | | SANITARY SEWER |
| | ROAD EASEMENT | | WATER LINE |
| | LIMITS OF DISTURBANCE | | CABLE LINE |
| | WETLAND AREA | | OVERHEAD POWER LINE |
| | | | POWER POLE |



THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.			REFERENCE TITLE				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	
0	05/10/18	FH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH	

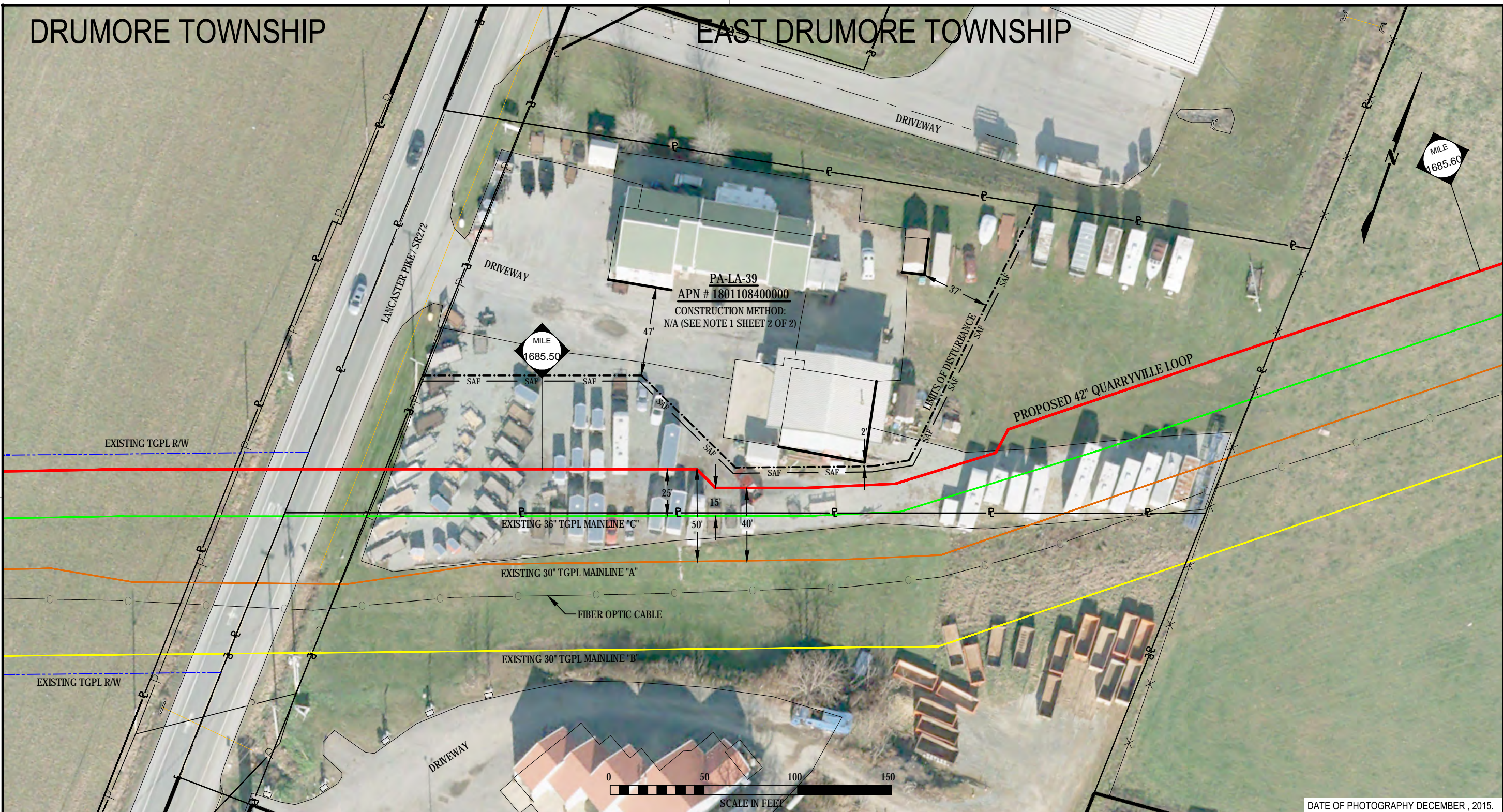
TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-40
EAST DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA



DRAWN BY: FH	DATE: 12/19/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: W.	DATE: 12/19/17	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: EL	DATE: 12/20/17	DRAWING NUMBER: 26-0100-70-06D-D/1685.50-01	SHEET 1 OF 2
W.O.: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17	4/5/2018 freddy.huerta	

DRUMORE TOWNSHIP

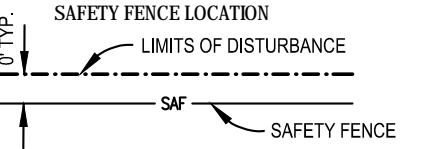
EAST DRUMORE TOWNSHIP



DATE OF PHOTOGRAPHY DECEMBER, 2015.

LEGEND

- | | | | | |
|--|--------------------------------|--|-----|--|
| | PROPOSED 42" QUARRYVILLE LOOP | | SAF | CONSTRUCTION SAFETY FENCE |
| | EXISTING 30" TGPL MAINLINE "A" | | | STREAM CROSSING |
| | EXISTING 30" TGPL MAINLINE "B" | | | RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION |
| | EXISTING 36" TGPL MAINLINE "C" | | | SINGLE TREE |
| | PROPOSED TGPL R/W | | | TREE LINE |
| | EXISTING TGPL R/W | | | EXISTING FENCE |
| | PROPERTY LINE | | | SANITARY SEWER |
| | ROAD EASEMENT | | | WATER LINE |
| | LIMITS OF DISTURBANCE | | | CABLE LINE |
| | WETLAND AREA | | | OVERHEAD POWER LINE |
| | | | | POWER POLE |



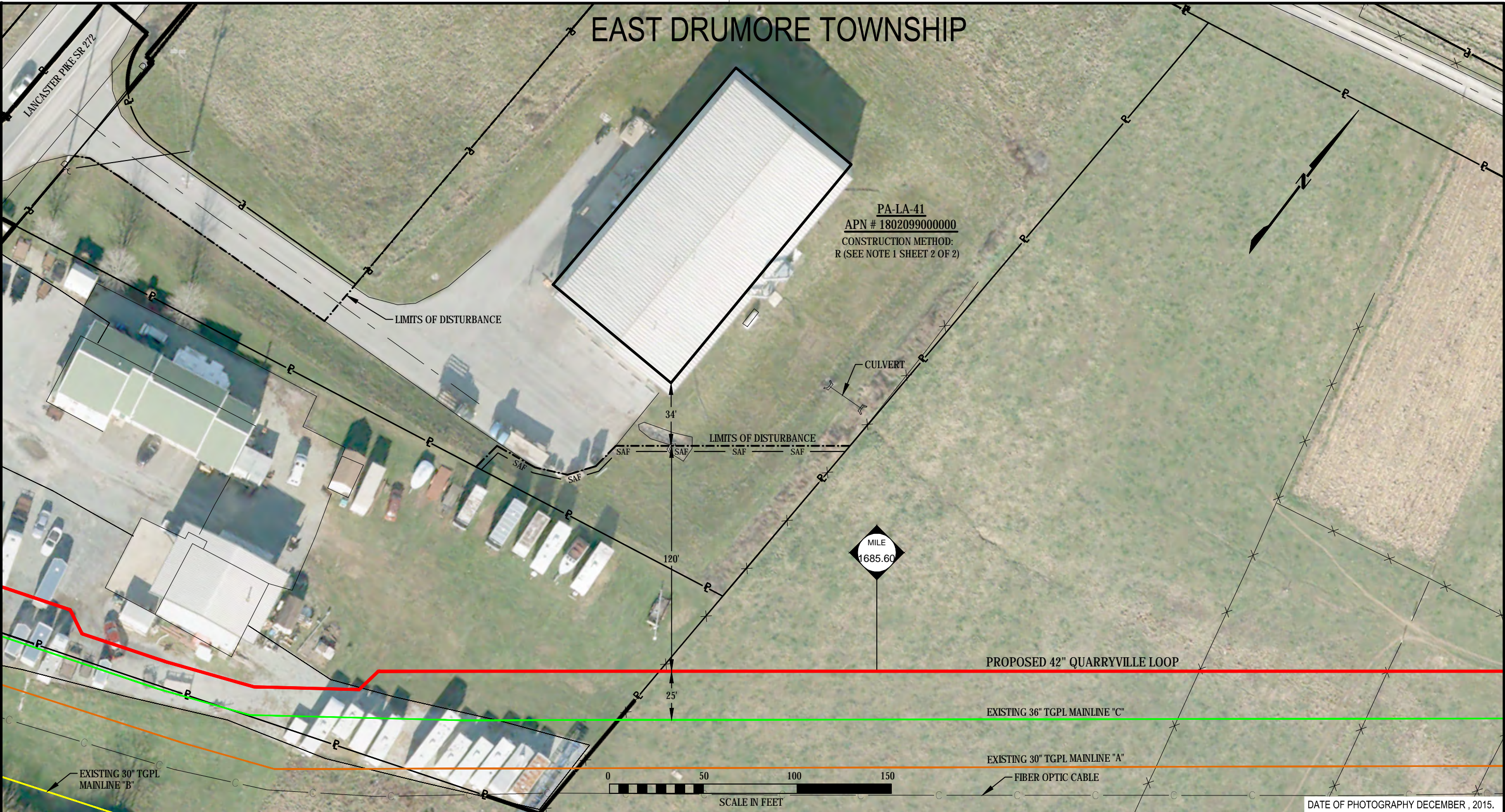
THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.			REFERENCE TITLE				
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	
0	05/10/18	FH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH	

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-39
EAST DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA

DRAWN BY: FH	DATE: 12/19/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: W.	DATE: 12/19/17	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: EL	DATE: 12/20/17	DRAWING NUMBER: 26-0100-70-06D-D/1685.53-01	SHEET 1 OF 2
WO: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17	4/5/2018 2:20pm K:\MAPPING\PA\MAIN\LOOP\1685_16\ACQUISITION\06D-RCPL.dwg	freddy.huerta

G-22



LEGEND

- PROPOSED 42" QUARRYVILLE LOOP
- EXISTING 30" TGPL MAINLINE "A"
- EXISTING 30" TGPL MAINLINE "B"
- EXISTING 36" TGPL MAINLINE "C"
- PROPOSED TGPL R/W
- EXISTING TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- LIMITS OF DISTURBANCE
- WETLAND AREA

- SAF
- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- SANITARY SEWER
- WATER LINE
- CABLE LINE
- OVERHEAD POWER LINE
- POWER POLE

WOOD GROUP USA, INC.

SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

SAF

SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE	

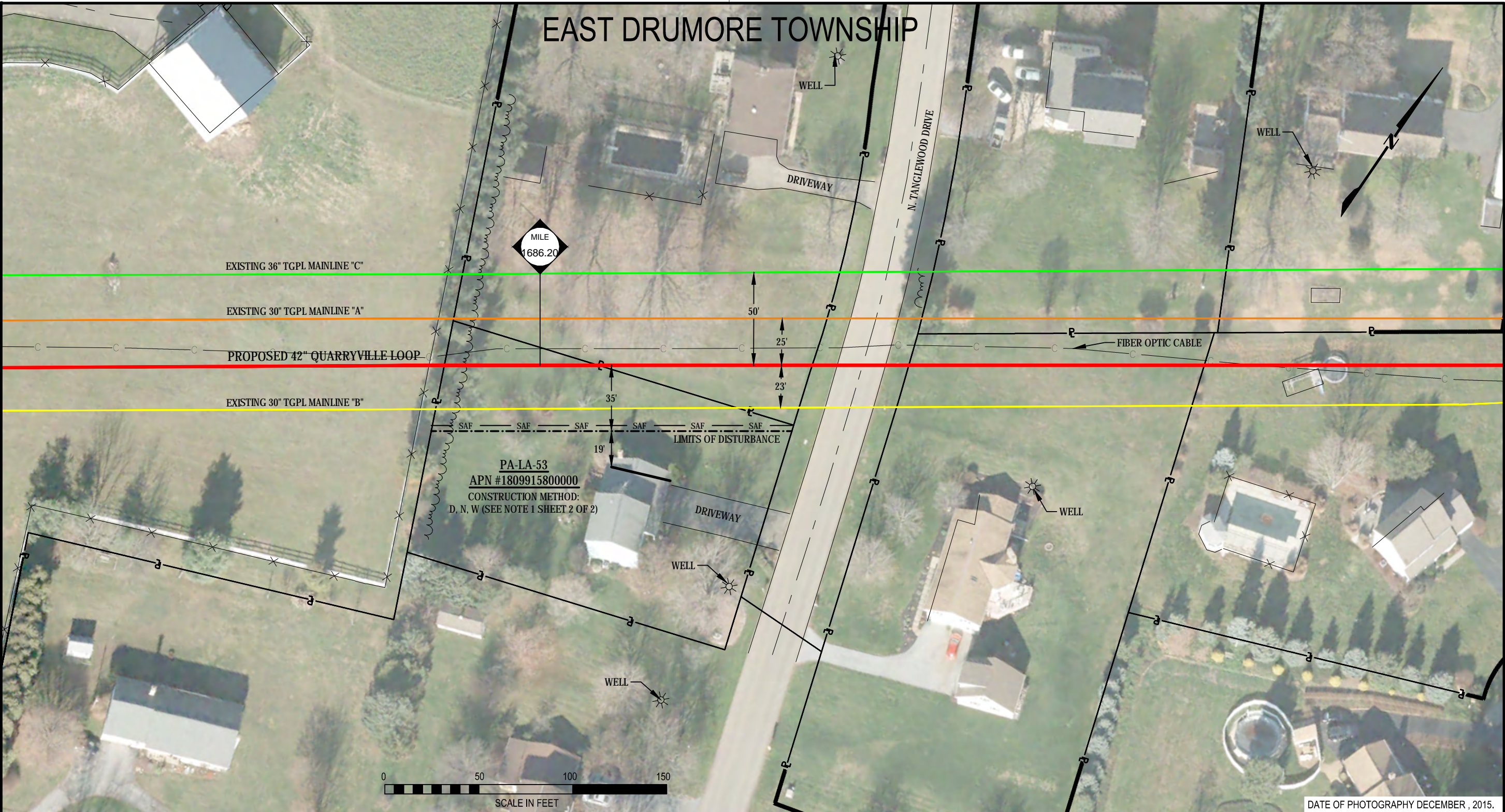
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-41
EAST DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA

Williams

DRAWN BY: FH	DATE: 02/01/18	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 02/01/18	ISSUED FOR CONSTRUCTION:	REVISION: 0
APPROVED BY: EL	DATE: 02/01/18	DRAWING NUMBER: 26-0100-70-06D-D/1685.58-01	SHEET 1 OF 2
WO: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17	4/5/2018 freddy.huerta R:\MAPPING\PA\MAIN\LOOP\1685_16\ACQUISITION\06D-RCPL\dwg\26-0100-70-06D-D_1685.58-01.dwg	

G-23



DATE OF PHOTOGRAPHY DECEMBER, 2015.

LEGEND

PROPOSED 42" QUARRYVILLE LOOP

EXISTING 30" TGPL MAINLINE "A"

EXISTING 30" TGPL MAINLINE "B"

EXISTING 36" TGPL MAINLINE "C"

PROPOSED TGPL R/W

EXISTING TGPL R/W

PROPERTY LINE

ROAD EASEMENT

LIMITS OF DISTURBANCE

WETLAND AREA

SAF

CONSTRUCTION SAFETY FENCE

STREAM CROSSING

RESIDENTIAL STRUCTURE
WITHIN 50' OF CONSTRUCTION

SINGLE TREE

TREE LINE

EXISTING FENCE

S

SANITARY SEWER

W

WATER LINE

C

CABLE LINE

P

OVERHEAD POWER LINE

O

POWER POLE

SAF

SAFETY FENCE

SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

0' TYP.

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN
IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY
FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL
BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

WOOD GROUP
USA, INC.

DRAWING NO.

REFERENCE TITLE

NO.

DATE

BY

REVISION DESCRIPTION

W.O. NO.

CHK.

APP.

0

08/25/17

MH

ISSUED FOR FERC SUPPLEMENTAL #3

1185726

CLR

MJH

1

05/10/18

MH

ISSUED FOR FERC SUPPLEMENTAL #6

1185726

W.

MJH

DRAWN BY:

DATE:

ISSUED FOR BID:

SCALE:

MH

08/15/17

1" = 50'

CHECKED BY:

DATE:

ISSUED FOR CONSTRUCTION:

REVISION:

ELR

08/15/17

1

APPROVED BY:

DATE:

DRAWING
NUMBER:

SHEET

EL

08/20/17

26-0100-70-06D-D/1686.22-01

1

WO:

ROUTE ID: 109

CIVIL: 01/08/18

ENV: 01/05/17

1185726

2:31pm

4/5/2018

26-0100-70-06D-D_1686.22-01.dwg

OF

2

LEGEND

- PROPOSED 42" QUARRYVILLE LOOP
- EXISTING 30" TGPL MAINLINE "A"
- EXISTING 30" TGPL MAINLINE "B"
- EXISTING 36" TGPL MAINLINE "C"
- PROPOSED TGPL R/W
- EXISTING TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- LIMITS OF DISTURBANCE
- [Wetland Symbol] WETLAND AREA

— SAF CONSTRUCTION SAFETY FENCE

[Stream Crossing Symbol] STREAM CROSSING

[Residential Structure Symbol] RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION

[Single Tree Symbol] SINGLE TREE

[Tree Line Symbol] TREE LINE

X EXISTING FENCE

S SANITARY SEWER

W WATER LINE

C CABLE LINE

P OVERHEAD POWER LINE

O POWER POLE

SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

SAF SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

WOOD GROUP USA, INC.

DRAWING NO.			REFERENCE TITLE			
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
01	08/25/17 05/10/18	MH MH	ISSUED FOR FERC SUPPLEMENTAL #3 ISSUED FOR FERC SUPPLEMENTAL #6	1185726 1185726	CLR W.	MJH MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-56
EAST DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA

DRAWN BY: MH	DATE: 08/15/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 08/15/17	ISSUED FOR CONSTRUCTION:	REVISION: 1

APPROVED BY: EL	DATE: 08/20/17	DRAWING NUMBER: 26-0100-70-06D-D/1686.24-01	SHEET 1 OF 2
WO: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17 K:\MAPPING\PA\MAIN\LOOP\1681_16\ACQUISITION\06D-RCPL\DWG\26-0100-70-06D-D_1686.24-01.dwg	4/5/2018 freddy.huerta	

EAST DRUMORE TOWNSHIP

GOLF VIEW DRIVE

PA-LA-57
APN #1802334900000
CONSTRUCTION METHOD:
D, N, W (SEE NOTE 1 SHEET 2 OF 2)

DRIVEWAY

DRIVEWAY

WELL

DRIVEWAY

N. TANGLEWOOD DRIVE

WELL

37' 39'

LIMITS OF DISTURBANCE

SAF

SAF

SAF

SAF

MILE
1686.30

EXISTING 36" TGPL MAINLINE "C"

EXISTING 30" TGPL MAINLINE "A"

FIBER OPTIC CABLE

PROPOSED 42" QUARRYVILLE LOOP

EXISTING 30" TGPL MAINLINE "B"

50'

65'

25'

21'

WELL

WELL

DRIVEWAY

WELL

DRIVEWAY

DRIVEWAY

WELL

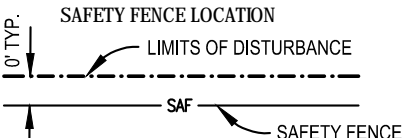
DRIVEWAY



DATE OF PHOTOGRAPHY DECEMBER, 2015.

LEGEND

- PROPOSED 42" QUARRYVILLE LOOP
- EXISTING 30" TGPL MAINLINE "A"
- EXISTING 30" TGPL MAINLINE "B"
- EXISTING 36" TGPL MAINLINE "C"
- PROPOSED TGPL R/W
- EXISTING TGPL R/W
- PROPERTY LINE
- ROAD EASEMENT
- LIMITS OF DISTURBANCE
- WETLAND AREA
- SAF CONSTRUCTION SAFETY FENCE
- STREAM CROSSING
- RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
- SINGLE TREE
- TREE LINE
- EXISTING FENCE
- S SANITARY SEWER
- W WATER LINE
- C CABLE LINE
- P OVERHEAD POWER LINE
- O POWER POLE

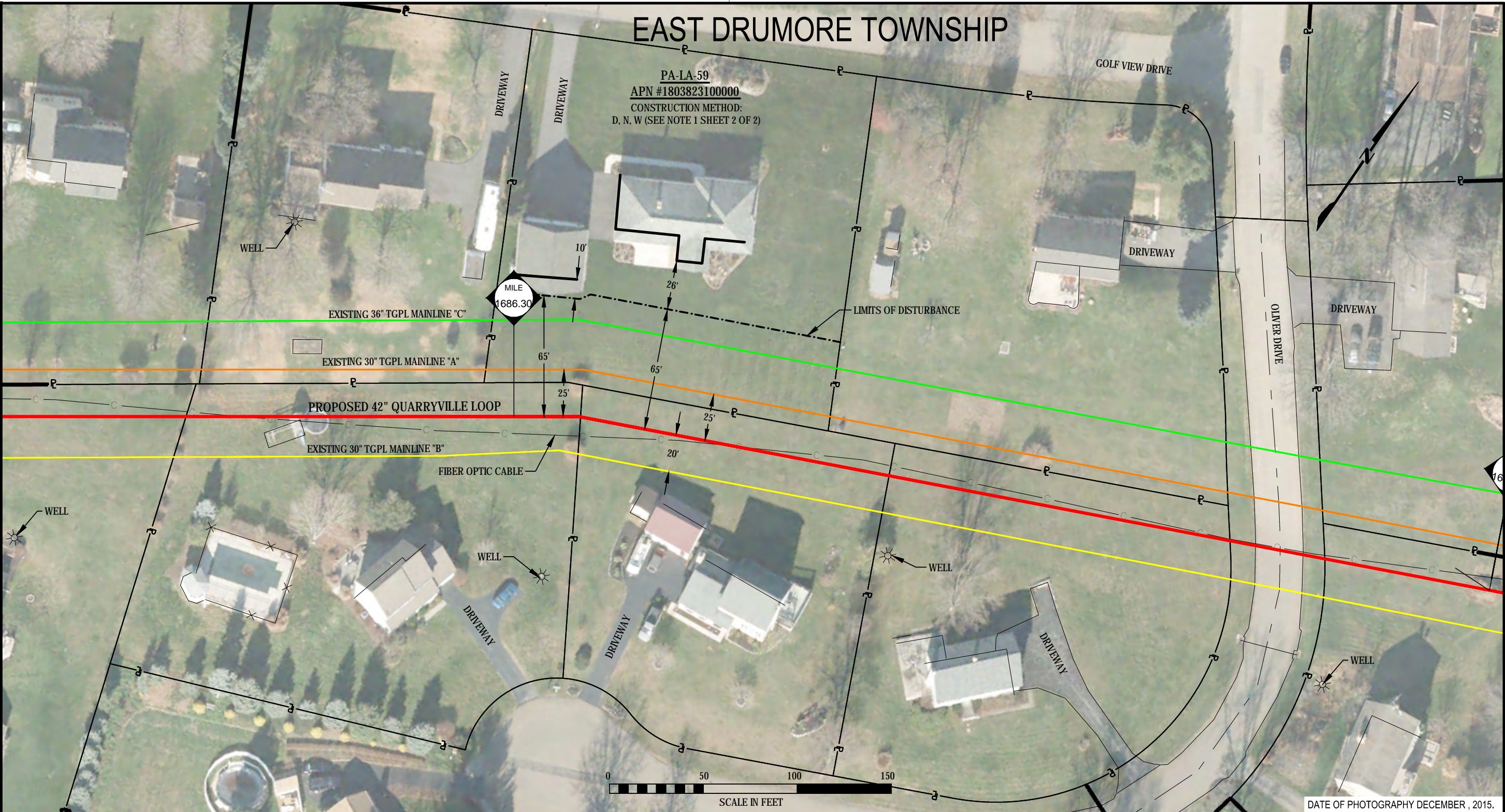


DRAWING NO.				REFERENCE TITLE			
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	
0	08/25/17	MH	ISSUED FOR FERC SUPPLEMENTAL #3	1185726	CLR	MJH	
1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH	



<div><div><div>LEGEND</div><div><div><div><div><div></div></div></div><div>PROPOSED 42" QUARRYVILLE LOOP</div></div><div><div><div><div></div></div></div><div>EXISTING 30" TGPL MAINLINE "A"</div></div><div><div><div><div></div></div></div><div>EXISTING 30" TGPL MAINLINE "B"</div></div><div><div><div><div></div></div></div><div>EXISTING 36" TGPL MAINLINE "C"</div></div><div><div><div><div></div></div></div><div>PROPOSED TGPL R/W</div></div><div><div><div><div></div></div></div><div>EXISTING TGPL R/W</div></div><div><div><div><div></div></div></div><div>PROPERTY LINE</div></div><div><div><div><div></div></div></div><div>ROAD EASEMENT</div></div><div><div><div><div></div></div></div><div>LIMITS OF DISTURBANCE</div></div><div><div><div><div></div></div></div><div>WETLAND AREA</div></div></div><div><div><div><div></div></div></div><div>SAF CONSTRUCTION SAFETY FENCE</div></div><div><div><div><div></div></div></div><div>STREAM CROSSING</div></div><div><div><div><div></div></div></div><div>RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION</div></div><div><div><div><div></div></div></div><div>SINGLE TREE</div></div><div><div><div><div></div></div></div><div>TREE LINE</div></div><div><div><div><div></div></div></div><div>EXISTING FENCE</div></div><div><div><div><div></div></div></div><div>SANITARY SEWER</div></div><div><div><div><div></div></div></div><div>WATER LINE</div></div><div><div><div><div></div></div></div><div>CABLE LINE</div></div><div><div><div><div></div></div></div><div>OVERHEAD POWER LINE</div></div><div><div><div><div></div></div></div><div>POWER POLE</div></div></div></div> <div><div><div><div><div><div></div></div><div>WOOD GROUP USA, INC.</div></div><div><div><div><div><div></div></div><div>SAFETY FENCE LOCATION</div></div><div><div><div><div></div></div><div>LIMITS OF DISTURBANCE</div></div><div><div><div><div></div></div><div>SAF SAFETY FENCE</div></div></div><div><div><div><div></div></div><div>0' TYP.</div></div></div></div><div><div><div><div></div></div><div>THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.</div></div></div></div></div><div><div><div><div><div><div>DRAWING NO.</div><div>REFERENCE TITLE</div></div><div><div><div><div><div>NO.</div><div>DATE</div><div>BY</div><div>REVISION DESCRIPTION</div><div>W.O. NO.</div><div>CHK.</div><div>APP.</div></div><div><div><div><div>0</div><div>03/20/17</div><div>MH</div><div>ISSUED FOR FERC FILING</div><div>1185726</div><div>CLR</div><div>MJH</div></div><div><div><div><div>1</div><div>08/25/17</div><div>MH</div><div>ISSUED FOR FERC SUPPLEMENTAL #3</div><div>1185726</div><div>CLR</div><div>MJH</div></div><div><div><div><div>2</div><div>05/10/18</div><div>MH</div><div>ISSUED FOR FERC SUPPLEMENTAL #6</div><div>1185726</div><div>W.</div><div>MJH</div></div></div></div></div><div><div><div><div><div>TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC</div><div>RESIDENTIAL CONSTRUCTION PLAN</div><div>NORTHEAST SUPPLY ENHANCEMENT PROJECT</div><div>PROPOSED 42" QUARRYVILLE LOOP</div><div>FOR THE PROPERTY OF TRACT NO. PA-LA-58</div><div>EAST DRUMORE TOWNSHIP</div><div>LANCASTER COUNTY, PENNSYLVANIA</div></div><div><div><div><div><div>Williams</div></div></div></div><div><div><div><div><div>DRAWN BY: MH</div><div>DATE: 12/20/16</div><div>ISSUED FOR BID:</div><div>SCALE: 1" = 50'</div></div><div><div><div><div>CHECKED BY: ELR</div><div>DATE: 12/27/16</div><div>ISSUED FOR CONSTRUCTION:</div><div>REVISION: 2</div></div><div><div><div><div>APPROVED BY: EL</div><div>DATE: 01/09/17</div><div>DRAWING NUMBER: 26-0100-70-06D-D/1686.29-01</div><div>WO: 1185726</div></div><div><div><div><div>ROUTE ID: 109 CIVIL: 01/08/18 4/5/2018 freddy.huerta</div><div>LAND: 01/15/18 ENV: 01/05/17 K:\MAPPING\PA\MAIN\LOOP\1681_16\ACQUISITION\06D-RCP\DWG\26-0100-70-06D-D_1686.29-01.dwg</div></div></div></div></div><div><div><div><div>SHEET 1</div><div>OF 2</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>									
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G-27



DATE OF PHOTOGRAPHY DECEMBER, 2015.

LEGEND									
	PROPOSED 42" QUARRYVILLE LOOP		SAF	CONSTRUCTION SAFETY FENCE					
	EXISTING 30" TGPL MAINLINE "A"			STREAM CROSSING					
	EXISTING 30" TGPL MAINLINE "B"			RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION					
	EXISTING 36" TGPL MAINLINE "C"			SINGLE TREE					
	PROPOSED TGPL R/W			TREE LINE					
	EXISTING TGPL R/W			EXISTING FENCE					
	PROPERTY LINE			SANITARY SEWER					
	ROAD EASEMENT			WATER LINE					
	LIMITS OF DISTURBANCE			CABLE LINE					
	WETLAND AREA			OVERHEAD POWER LINE					
				POWER POLE					

**WOOD GROUP
USA, INC.**

SAF SAF

0' TYP. SAF

SAFETY FENCE LOCATION

LIMITS OF DISTURBANCE

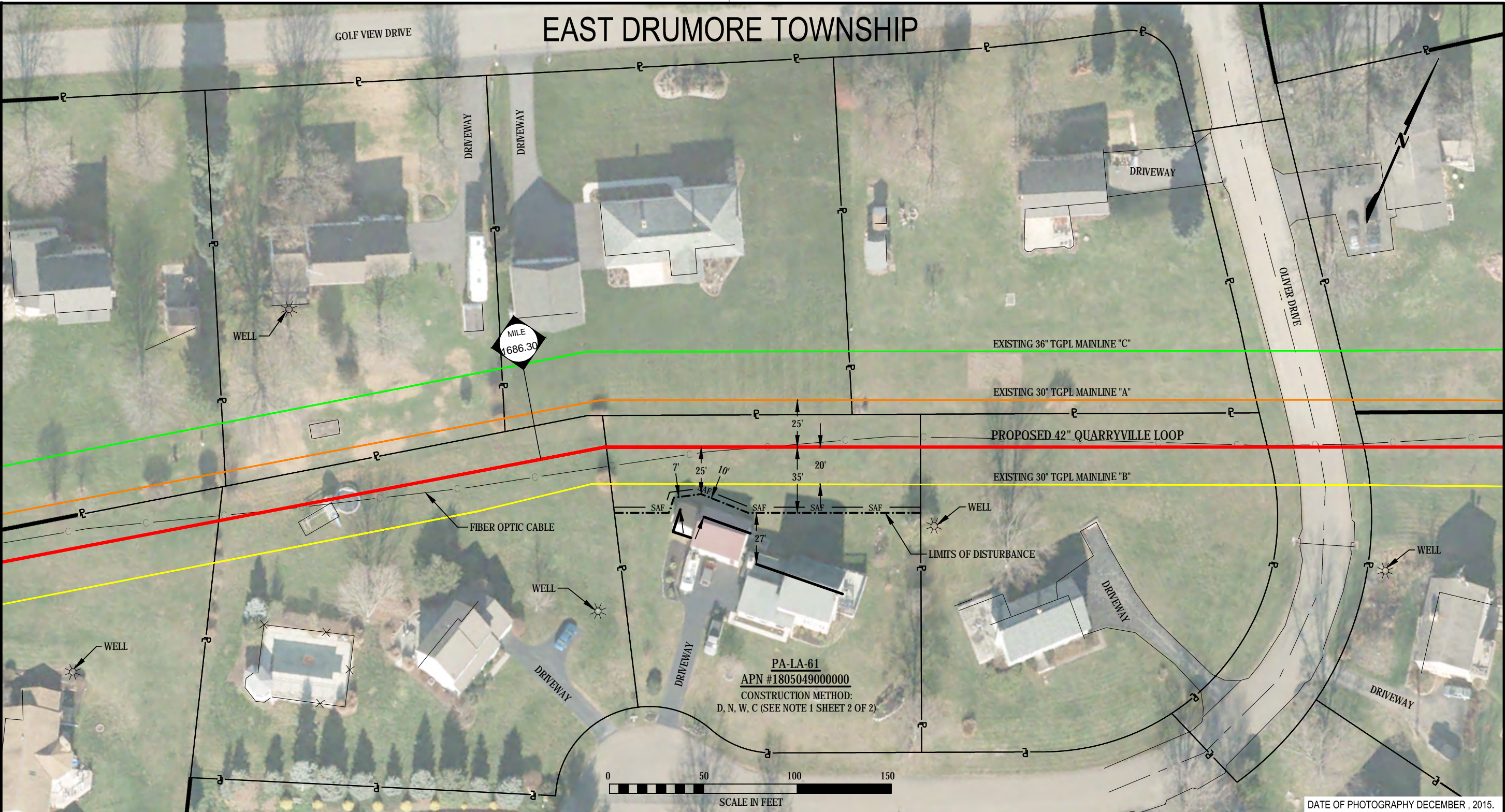
SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE	

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	03/20/17	MH	ISSUED FOR FERC FILING	1185726	CLR	MJH
1	08/25/17	MH	ISSUED FOR FERC SUPPLEMENTAL #3	1185726	CLR	MJH
2	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC RESIDENTIAL CONSTRUCTION PLAN NORTHEAST SUPPLY ENHANCEMENT PROJECT PROPOSED 42" QUARRYVILLE LOOP FOR THE PROPERTY OF TRACT NO. PA-LA-59 EAST DRUMORE TOWNSHIP LANCASTER COUNTY, PENNSYLVANIA					
DRAWN BY: MH		DATE: 12/20/16		ISSUED FOR BID:	
CHECKED BY: ELR		DATE: 12/27/16		ISSUED FOR CONSTRUCTION:	
APPROVED BY: EL		DATE: 01/09/17		DRAWING NUMBER: 26-0100-70-06D-D/1686.30-01	
WO: 1185726		ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17		SHEET 1 OF 2	



LEGEND

PROPOSED 42" QUARRYVILLE LOOP

EXISTING 30" TGPL MAINLINE "A"

EXISTING 30" TGPL MAINLINE "B"

EXISTING 36" TGPL MAINLINE "C"

PROPOSED TGPL R/WROAD EASEMENTCONSTRUCTION SAFETY FENCE

**WOOD GROUP
USA, INC.**

SAF

LIMITS OF DISTURBANCE

SAF

SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.			REFERENCE TITLE		

NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.
0	03/20/17	MH	ISSUED FOR FERC FILING	1185726	CLR	MJH
1	08/25/17	MH	ISSUED FOR FERC SUPPLEMENTAL #3	1185726	CLR	MJH
2	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH

DRAWN BY: MH		DATE: 12/20/16		ISSUED FOR BID:		SCALE: 1" = 50'	
CHECKED BY: ELR		DATE: 12/27/16		ISSUED FOR CONSTRUCTION:		REVISION: 2	
APPROVED BY: EL		DATE: 01/09/17		DRAWING NUMBER: 26-0100-70-06D-D/1686.31-01		SHEET 1 OF 2	
WO: 1185726		ROUTE ID: 109 CIVIL: 01/08/18		4/5/2018		freddy.huerta	
		LAND: 01/15/18 ENV: 01/05/17		K:\MAPPING\PA\MAIN\LOOP\1686.31-01\ACQUISITION\06D-RCPL\dwg\26-0100-70-06D-D_1686.31-01.dwg			

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC

RESIDENTIAL CONSTRUCTION PLAN

NORTHEAST SUPPLY ENHANCEMENT PROJECT

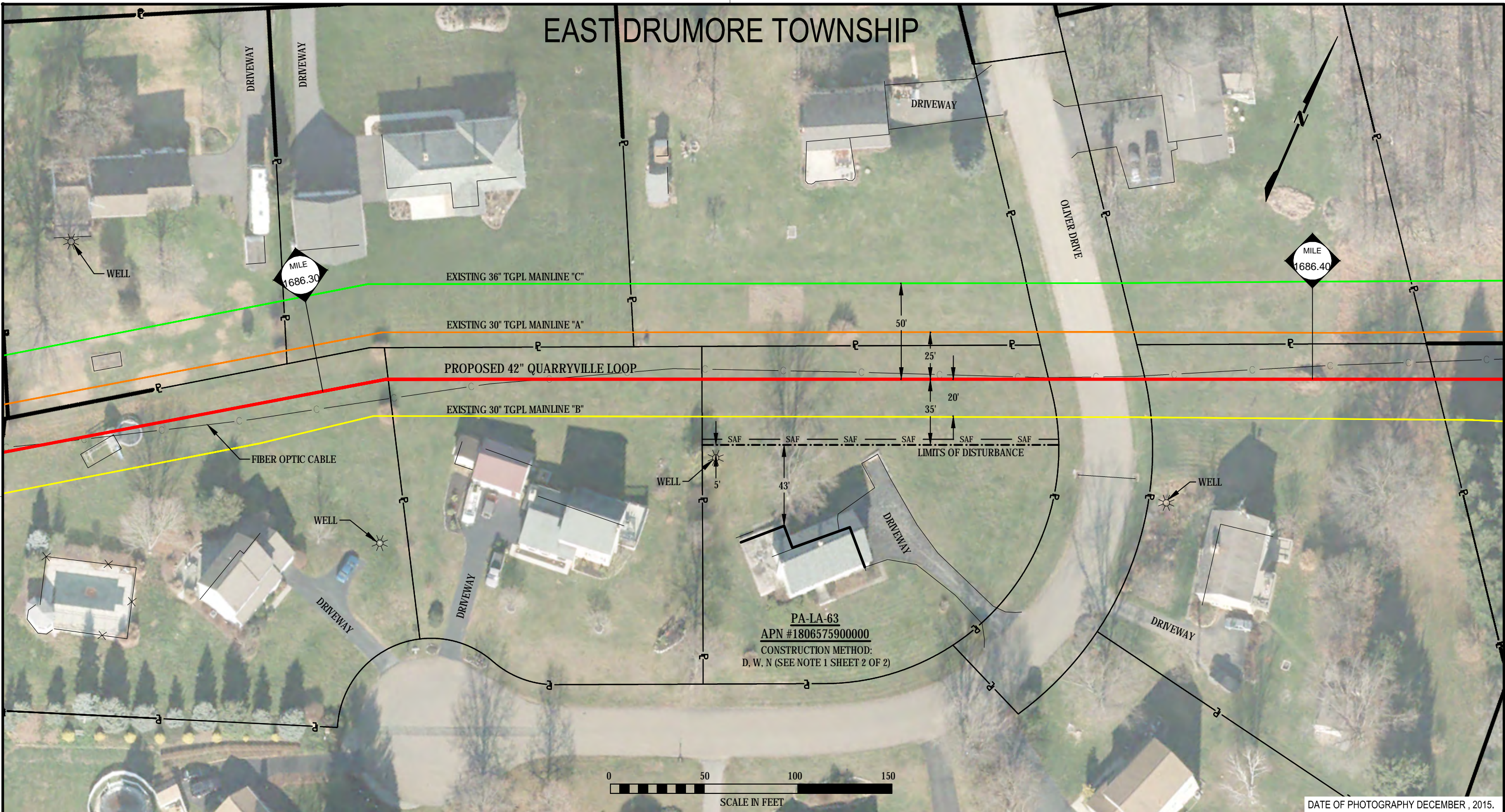
PROPOSED 42" QUARRYVILLE LOOP

FOR THE PROPERTY OF TRACT NO. PA-LA-61

EAST DRUMORE TOWNSHIP

LANCASTER COUNTY, PENNSYLVANIA

EAST DRUMORE TOWNSHIP

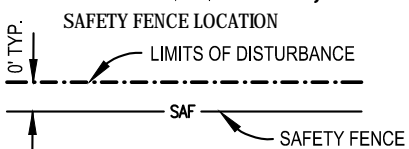


LEGEND

- | | | | |
|--|--------------------------------|--|--|
| | PROPOSED 42" QUARRYVILLE LOOP | | CONSTRUCTION SAFETY FENCE |
| | EXISTING 30" TGPL MAINLINE "A" | | STREAM CROSSING |
| | EXISTING 30" TGPL MAINLINE "B" | | RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION |
| | EXISTING 36" TGPL MAINLINE "C" | | SINGLE TREE |
| | PROPOSED TGPL R/W | | TREE LINE |
| | EXISTING TGPL R/W | | EXISTING FENCE |
| | PROPERTY LINE | | SANITARY SEWER |
| | ROAD EASEMENT | | WATER LINE |
| | LIMITS OF DISTURBANCE | | CABLE LINE |
| | WETLAND AREA | | OVERHEAD POWER LINE |
| | | | POWER POLE |



WOOD GROUP
USA, INC.



THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

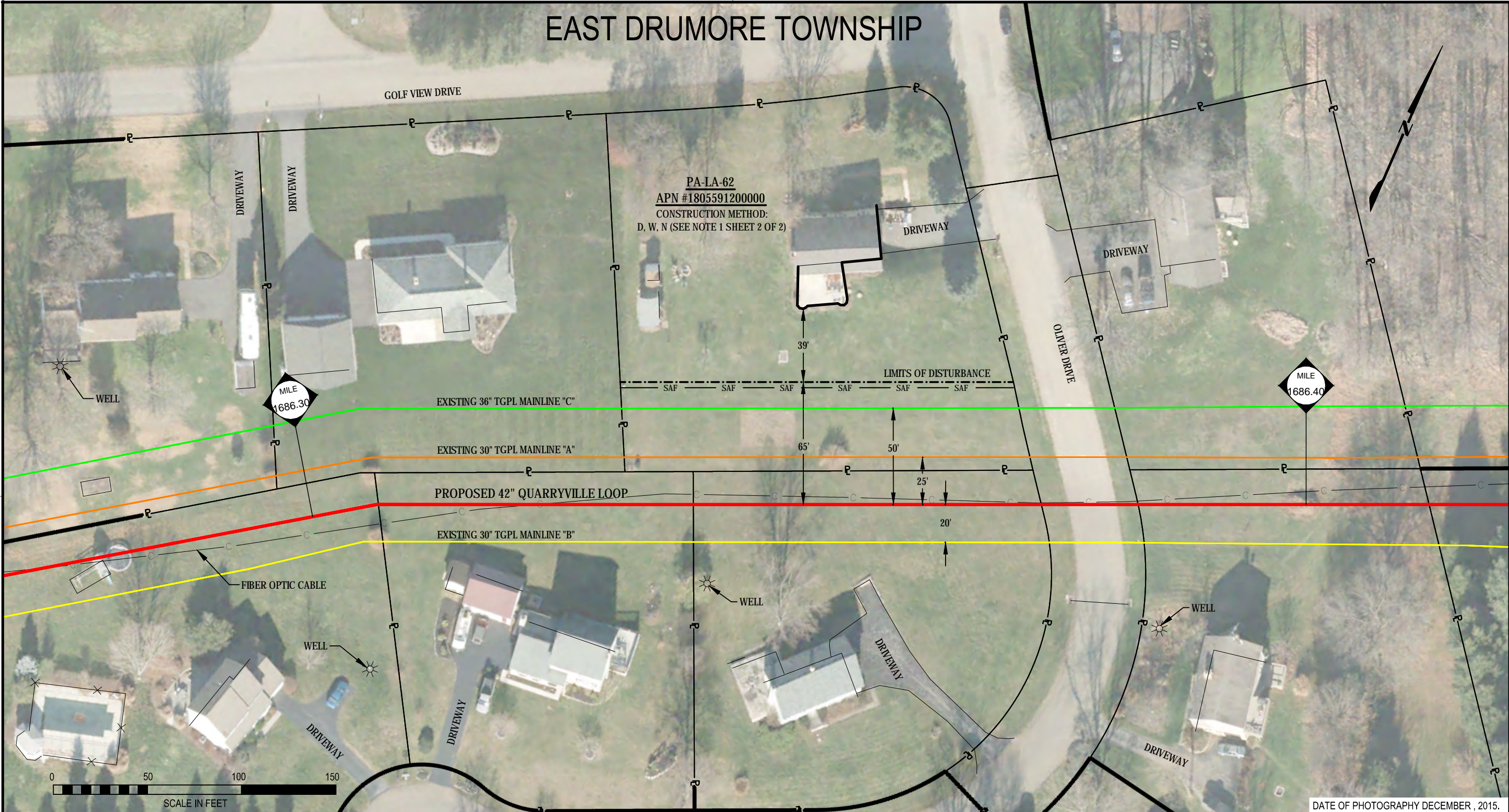
DRAWING NO.		REFERENCE TITLE	
NO.	DATE	BY	REVISION DESCRIPTION
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1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6
W.O. NO.	CHK.	APP.	
1185726	CLR	MJH	
1185726	W.	MJH	

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-63
EAST DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA



DRAWN BY: MH	DATE: 08/15/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 08/15/17	ISSUED FOR CONSTRUCTION:	REVISION: 1
APPROVED BY: EL	DATE: 08/20/17	DRAWING NUMBER: 26-0100-70-06D-D/1686.35-01	SHEET 1
WO: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 2:56pm LAND: 01/15/18 ENV: 01/05/17	4/5/2018 freddy.huerta	OF 2

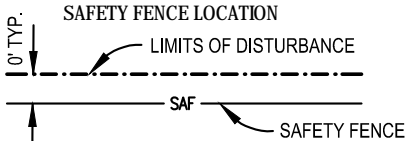
EAST DRUMORE TOWNSHIP



DATE OF PHOTOGRAPHY DECEMBER, 2015.

LEGEND

- | | | | |
|--|--------------------------------|--|--|
| | PROPOSED 42" QUARRYVILLE LOOP | | CONSTRUCTION SAFETY FENCE |
| | EXISTING 30" TGPL MAINLINE "A" | | STREAM CROSSING |
| | EXISTING 30" TGPL MAINLINE "B" | | RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION |
| | EXISTING 36" TGPL MAINLINE "C" | | SINGLE TREE |
| | PROPOSED TGPL R/W | | TREE LINE |
| | EXISTING TGPL R/W | | EXISTING FENCE |
| | PROPERTY LINE | | SANITARY SEWER |
| | ROAD EASEMENT | | WATER LINE |
| | LIMITS OF DISTURBANCE | | CABLE LINE |
| | WETLAND AREA | | OVERHEAD POWER LINE |
| | | | POWER POLE |



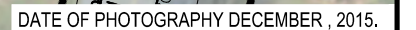
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DRAWING NO.		REFERENCE TITLE					
NO.	DATE	BY	REVISION DESCRIPTION	W.O. NO.	CHK.	APP.	
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1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6	1185726	W.	MJH	

TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC
RESIDENTIAL CONSTRUCTION PLAN
NORTHEAST SUPPLY ENHANCEMENT PROJECT
PROPOSED 42" QUARRYVILLE LOOP
FOR THE PROPERTY OF TRACT NO. PA-LA-62
EAST DRUMORE TOWNSHIP
LANCASTER COUNTY, PENNSYLVANIA

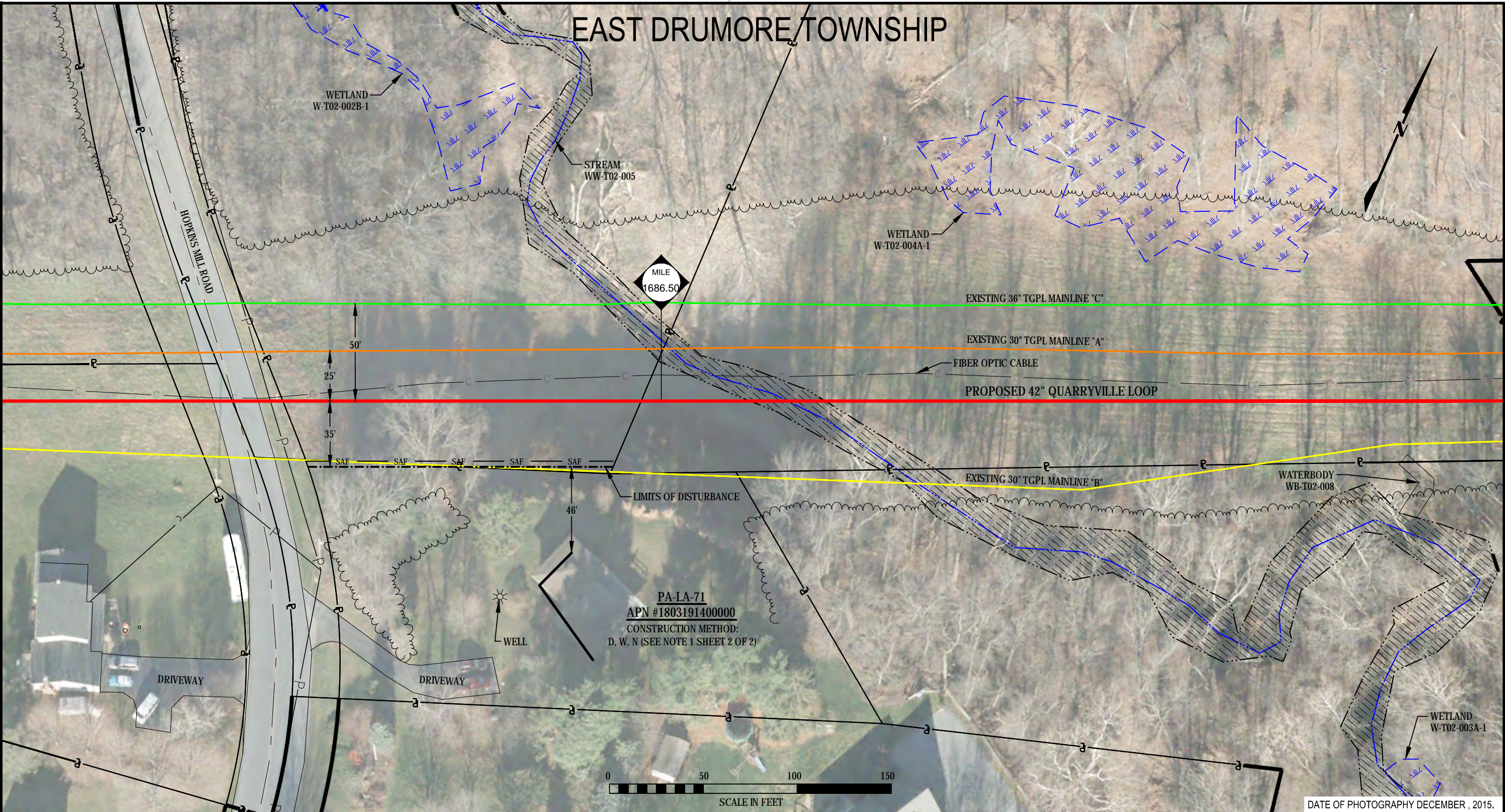


DRAWN BY: MH	DATE: 08/15/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR	DATE: 08/15/17	ISSUED FOR CONSTRUCTION:	REVISION: 1
APPROVED BY: EL	DATE: 08/20/17	DRAWING NUMBER: 26-0100-70-06D-D/1686.36-01	SHEET 1
WO: 1185726	ROUTE ID: 109 CIVIL: 01/08/18 LAND: 01/15/18 ENV: 01/05/17	4/5/2018 K:\MAPPING\PA\MAIN\LOOP\1686_16\ACQUISITION\06D-RCPL\dwg\26-0100-70-06D-D_1686.36-01.dwg	OF 2



<div><div><div>LEGEND</div><div><div><div><div><div></div></div></div><div>PROPOSED 42" QUARRYVILLE LOOP</div></div><div><div><div><div></div></div></div><div>EXISTING 30" TGPL MAINLINE "A"</div></div><div><div><div><div></div></div></div><div>EXISTING 30" TGPL MAINLINE "B"</div></div><div><div><div><div></div></div></div><div>EXISTING 36" TGPL MAINLINE "C"</div></div><div><div><div><div></div></div></div><div>PROPOSED TGPL R/W</div></div><div><div><div><div></div></div></div><div>EXISTING TGPL R/W</div></div><div><div><div><div></div></div></div><div>PROPERTY LINE</div></div><div><div><div><div></div></div></div><div>ROAD EASEMENT</div></div><div><div><div><div></div></div></div><div>LIMITS OF DISTURBANCE</div></div><div><div><div><div></div></div></div><div>WETLAND AREA</div></div></div><div><div><div><div><div></div></div></div><div>CONSTRUCTION SAFETY FENCE</div></div><div><div><div><div></div></div></div><div>STREAM CROSSING</div></div><div><div><div><div></div></div></div><div>RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION</div></div><div><div><div><div></div></div></div><div>SINGLE TREE</div></div><div><div><div><div></div></div></div><div>TREE LINE</div></div><div><div><div><div></div></div></div><div>EXISTING FENCE</div></div><div><div><div><div></div></div></div><div>SANITARY SEWER</div></div><div><div><div><div></div></div></div><div>WATER LINE</div></div><div><div><div><div></div></div></div><div>CABLE LINE</div></div><div><div><div><div></div></div></div><div>OVERHEAD POWER LINE</div></div><div><div><div><div></div></div></div><div>POWER POLE</div></div></div></div><div><div><div><div><div></div></div></div><div>WOOD GROUP USA, INC.</div></div><div><div><div><div><div></div></div></div><div>SAFETY FENCE LOCATION</div></div><div><div><div><div></div></div></div><div>LIMITS OF DISTURBANCE</div></div><div><div><div><div></div></div></div><div>SAF</div></div><div><div><div><div></div></div></div><div>SAFETY FENCE</div></div></div><div><div><div><div></div></div></div><div>THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.</div></div></div></div> <div><div><div><div><div>DRAWING NO.</div><div>REFERENCE TITLE</div></div><div><div><div><div>NO.</div><div>DATE</div><div>BY</div><div>REVISION DESCRIPTION</div><div>W.O. NO.</div><div>CHK.</div><div>APP.</div></div><div><div><div><div>0</div><div>08/25/17</div><div>MH</div><div>ISSUED FOR FERC SUPPLEMENTAL #3</div><div>1185726</div><div>CLR</div><div>MJH</div></div><div><div><div><div>1</div><div>05/10/18</div><div>MH</div><div>ISSUED FOR FERC SUPPLEMENTAL #6</div><div>1185726</div><div>W.</div><div>MJH</div></div></div></div></div><div><div><div><div><div>DRAWN BY: MH</div><div>DATE: 08/15/17</div><div>ISSUED FOR BID:</div><div>SCALE: 1" = 50'</div></div><div><div><div><div>CHECKED BY: ELR</div><div>DATE: 08/15/17</div><div>ISSUED FOR CONSTRUCTION:</div><div>REVISION: 1</div></div><div><div><div><div>APPROVED BY: EL</div><div>DATE: 08/20/17</div><div>DRAWING NUMBER: 26-0100-70-06D-D/1686.39-01</div><div>WO: 1185726</div></div><div><div><div><div>ROUTE ID: 109 CIVIL: 01/08/17</div><div>LAND: 01/15/18 ENV: 01/05/17</div><div>K:\MAPPING\PA\MAIN\LOOP\1681_16\ACQUISITION\06D-RCP\DWG\26-0100-70-06D-D_1686.39-01.dwg</div></div><div><div><div>4/5/2018</div><div>freddy.huerta</div></div></div></div></div><div><div><div>SHEET 1</div><div>OF 2</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div> </									
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G-32



LEGEND

	PROPOSED 42" QUARRYVILLE LOOP
	EXISTING 30" TGPL MAINLINE "A"
	EXISTING 30" TGPL MAINLINE "B"
	EXISTING 36" TGPL MAINLINE "C"
	PROPOSED TGPL R/W
	EXISTING TGPL R/W
	PROPERTY LINE
	ROAD EASEMENT
	LIMITS OF DISTURBANCE
	WETLAND AREA
	CONSTRUCTION SAFETY FENCE
	STREAM CROSSING
	RESIDENTIAL STRUCTURE WITHIN 50' OF CONSTRUCTION
	SINGLE TREE
	TREE LINE
	EXISTING FENCE
	SANITARY SEWER
	WATER LINE
	CABLE LINE
	OVERHEAD POWER LINE
	POWER POLE

WOOD GROUP USA, INC.

SAFETY FENCE LOCATION

0' TYP.

LIMITS OF DISTURBANCE

SAF

SAFETY FENCE

THE LOCATION OF THE SAFETY FENCES SHOWN IN THE PLAN IS APPROXIMATE AND ADJUSTED FOR CLARITY. SAFETY FENCES LOCATED NEAR THE LIMITS OF DISTURBANCE SHALL BE INSTALLED AT THE LIMIT LINE AS SHOWN ABOVE.

DRAWING NO.		REFERENCE TITLE	
NO.	DATE	BY	REVISION DESCRIPTION
0	08/25/17	MH	ISSUED FOR FERC SUPPLEMENTAL #3
1	05/10/18	MH	ISSUED FOR FERC SUPPLEMENTAL #6
W.O. NO.	CHK.	APP.	
1185726	CLR	MJH	
1185726	W.	MJH	

DRAWN BY: MH		DATE: 08/15/17	ISSUED FOR BID:	SCALE: 1" = 50'
CHECKED BY: ELR		DATE: 08/15/17	ISSUED FOR CONSTRUCTION:	REVISION: 1
APPROVED BY: EL		DATE: 08/20/17	DRAWING NUMBER: 26-0100-70-06D-D/1686.49-01	SHEET 1 OF 2
WO: 1185726		ROUTE ID: 109 CIVIL: 01/08/18 3:13pm	4/5/2018 fredy.huerta	
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TRANSCONTINENTAL GAS PIPE LINE COMPANY LLC

RESIDENTIAL CONSTRUCTION PLAN

NORTHEAST SUPPLY ENHANCEMENT PROJECT

PROPOSED 42" QUARRYVILLE LOOP

FOR THE PROPERTY OF TRACT NO. PA-LA-71

EAST DRUMORE TOWNSHIP

LANCASTER COUNTY, PENNSYLVANIA

Williams

APPENDIX H

NORTHERN LONG-EARED BAT 4(D) STREAMLINED CONSULTATION FORMS

Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form

Federal agencies should use this form for the optional streamlined consultation framework for the northern long-eared bat (NLEB). This framework allows federal agencies to rely upon the U.S. Fish and Wildlife Service's (USFWS) January 5, 2016, intra-Service Programmatic Biological Opinion (BO) on the final 4(d) rule for the NLEB for section 7(a)(2) compliance by: (1) notifying the USFWS that an action agency will use the streamlined framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the USFWS to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16.

This form is not necessary if an agency determines that a proposed action will have no effect to the NLEB or if the USFWS has concurred in writing with an agency's determination that a proposed action may affect, but is not likely to adversely affect the NLEB (i.e., the standard informal consultation process). Actions that may cause prohibited incidental take require separate formal consultation. Providing this information does not address section 7(a)(2) compliance for any other listed species.

Information to Determine 4(d) Rule Compliance:	YES	NO
1. Does the project occur wholly outside of the WNS Zone ¹ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Have you contacted the appropriate agency ² to determine if your project is near known hibernacula or maternity roost trees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Could the project disturb hibernating NLEBs in a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Could the project alter the entrance or interior environment of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does the project remove any trees within 0.25 miles of a known hibernaculum at any time of year?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Would the project cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree from June 1 through July 31.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

You are eligible to use this form if you have answered yes to question #1 **or** yes to question #2 **and** no to questions 3, 4, 5 and 6. The remainder of the form will be used by the USFWS to track our assumptions in the BO.

Agency and Applicant³ (Name, Email, Phone No.):

AGENCY:

Federal Energy Regulatory Commission
Christine Allen
Christine.Allen@ferc.gov
(202) 502-6847

APPLICANT:

Transcontinental Gas Pipe Line Company, LLC
Karen Olson
karen.olson@williams.com
(713) 215-4232

¹ <http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf>

² See <http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html>

³ If applicable - only needed for federal actions with applicants (e.g., for a permit, etc.) who are party to the consultation.

Project Name: Northeast Supply Enhancement Project (NESE Project)

Project Location (include coordinates if known): The NESE Project would involve new or expanded natural gas transmission facilities in Lancaster and Chester Counties, Pennsylvania. See the attached map.

Basic Project Description (provide narrative below or attach additional information):

The NESE Project in Pennsylvania includes the construction and operation of 10.2 miles of 42-inch-diameter pipeline loop in Lancaster County, Pennsylvania (the Quarryville Loop); modification of existing Compressor Station 200 in Chester County, Pennsylvania; and appurtenant facilities. Modifications at existing Compressor Station 200 would occur within the fenced facility and are not expected to require tree clearing. Based on consultation with the FWS, the Project's potential to affect the NLEB in Pennsylvania is limited to the Quarryville Loop, with tree clearing impacts totaling 6.3 acres.

*Per the FWS' recommendation, Transco would conduct tree clearing activities between September 1 and March 31 along the Quarryville Loop.

General Project Information	YES	NO
Does the project occur within 0.25 miles of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project occur within 150 feet of a known maternity roost tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project include forest conversion ⁴ ? (if yes, report acreage below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Estimated total acres of forest conversion	6.3 acres	
If known, estimated acres ⁵ of forest conversion from April 1 to October 31	*See above	
If known, estimated acres of forest conversion from June 1 to July 31 ⁶	0	
Does the project include timber harvest? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of timber harvest		
If known, estimated acres of timber harvest from April 1 to October 31		
If known, estimated acres of timber harvest from June 1 to July 31		
Does the project include prescribed fire? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of prescribed fire		
If known, estimated acres of prescribed fire from April 1 to October 31		
If known, estimated acres of prescribed fire from June 1 to July 31		
Does the project install new wind turbines? (if yes, report capacity in MW below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated wind capacity (MW)		

Agency Determination:

By signing this form, the action agency determines that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

If the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5,

⁴ Any activity that temporarily or permanently removes suitable forested habitat, including, but not limited to, tree removal from development, energy production and transmission, mining, agriculture, etc. (see page 48 of the BO).

⁵ If the project removes less than 10 trees and the acreage is unknown, report the acreage as less than 0.1 acre.

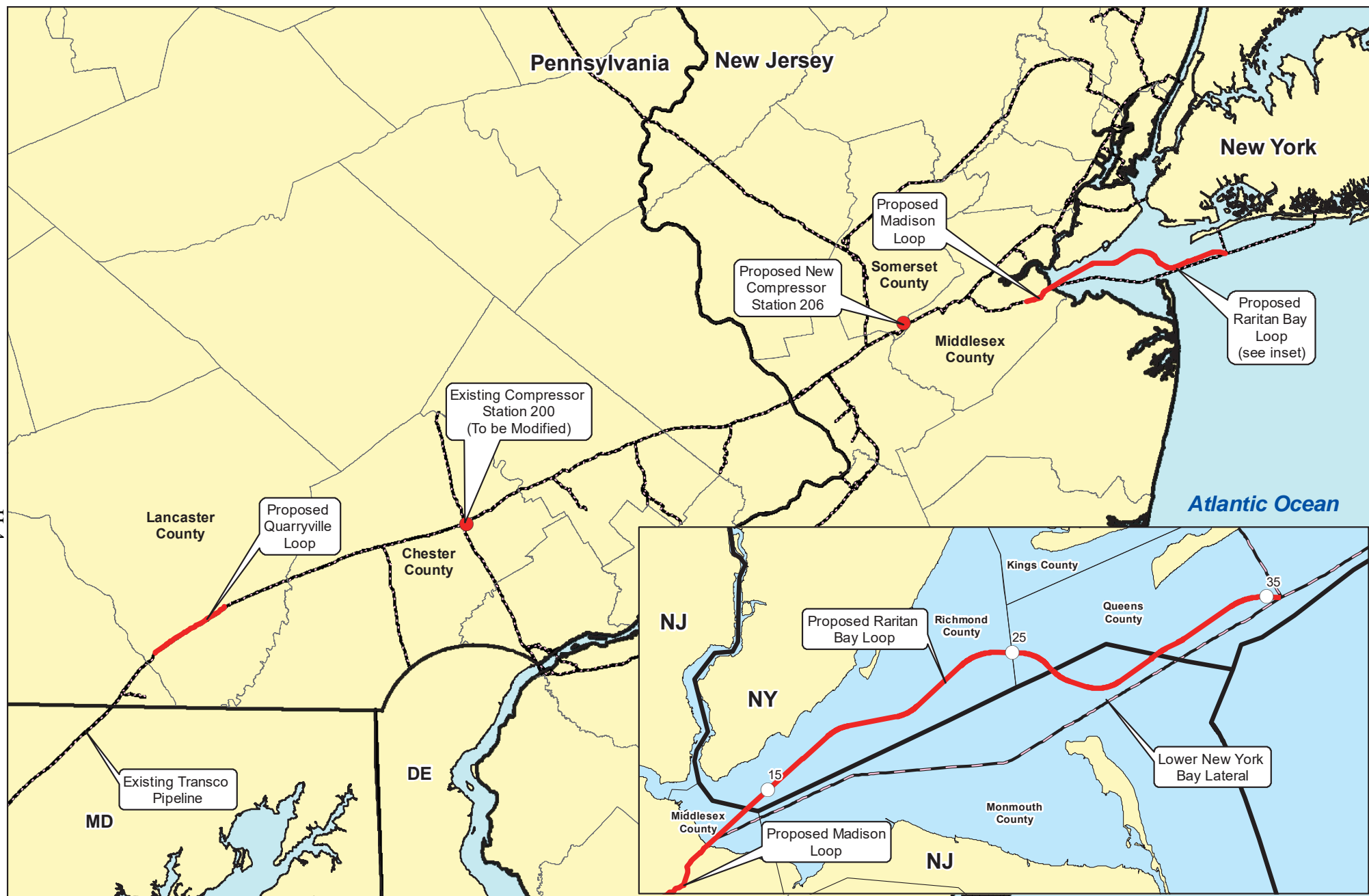
⁶ If the activity includes tree clearing in June and July, also include those acreage in April to October.

2016, Programmatic BO. The action agency will update this determination annually for multi-year activities.

The action agency understands that the USFWS presumes that all activities are implemented as described herein. The action agency will promptly report any departures from the described activities to the appropriate USFWS Field Office. The action agency will provide the appropriate USFWS Field Office with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the appropriate USFWS Field Office upon finding a dead, injured, or sick NLEB.

Signature: Christie E. Allen

Date Submitted: 11/7/18



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For Environmental Review Purposes Only

Figure 1-1
Northeast Supply Enhancement Project
Project Overview Map

Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form

Federal agencies should use this form for the optional streamlined consultation framework for the northern long-eared bat (NLEB). This framework allows federal agencies to rely upon the U.S. Fish and Wildlife Service's (USFWS) January 5, 2016, intra-Service Programmatic Biological Opinion (BO) on the final 4(d) rule for the NLEB for section 7(a)(2) compliance by: (1) notifying the USFWS that an action agency will use the streamlined framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the USFWS to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16.

This form is not necessary if an agency determines that a proposed action will have no effect to the NLEB or if the USFWS has concurred in writing with an agency's determination that a proposed action may affect, but is not likely to adversely affect the NLEB (i.e., the standard informal consultation process). Actions that may cause prohibited incidental take require separate formal consultation. Providing this information does not address section 7(a)(2) compliance for any other listed species.

Information to Determine 4(d) Rule Compliance:	YES	NO
1. Does the project occur wholly outside of the WNS Zone ¹ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Have you contacted the appropriate agency ² to determine if your project is near known hibernacula or maternity roost trees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Could the project disturb hibernating NLEBs in a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Could the project alter the entrance or interior environment of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does the project remove any trees within 0.25 miles of a known hibernaculum at any time of year?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Would the project cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree from June 1 through July 31.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

You are eligible to use this form if you have answered yes to question #1 **or** yes to question #2 **and** no to questions 3, 4, 5 and 6. The remainder of the form will be used by the USFWS to track our assumptions in the BO.

Agency and Applicant³ (Name, Email, Phone No.):

AGENCY:

Federal Energy Regulatory Commission
Christine Allen
Christine.Allen@ferc.gov
(202) 502-6847

APPLICANT:

Transcontinental Gas Pipe Line Company, LLC
Karen Olson
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¹ <http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf>

² See <http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html>

³ If applicable - only needed for federal actions with applicants (e.g., for a permit, etc.) who are party to the consultation.

Project Name: Northeast Supply Enhancement Project (NESE Project)

Project Location (include coordinates if known): The onshore portion of the NESE Project would involve new or expanded natural gas transmission facilities in Somerset and Middlesex Counties, New Jersey. See the attached map.

Basic Project Description (provide narrative below or attach additional information):

The NESE Project in New Jersey includes the construction and operation of 3.4 miles of 26-inch-diameter pipeline loop in Middlesex County, New Jersey (the Madison Loop); 0.2 mile of 26-inch-diameter onshore pipeline loop in Middlesex County, New Jersey (the Raritan Bay Loop); construction of new Compressor Station 206 in Somerset County, New Jersey; and appurtenant facilities.

Construction of the onshore portion of the Raritan Bay Loop would not require tree clearing. Based on consultation with the FWS, the Project's potential to affect the NLEB in New Jersey is limited to Compressor Station 206 and the Madison Loop; with 19.3 acres of tree clearing associated with construction of Compressor Station 206, and 12.5 acres associated with the Madison Loop.

*Per the FWS' recommendation, Transco would conduct tree clearing activities between October 1 and March 31 at Compressor Station 206; and between September 1 and March 31 along the Madison Loop.

General Project Information	YES	NO
Does the project occur within 0.25 miles of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project occur within 150 feet of a known maternity roost tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project include forest conversion ⁴ ? (if yes, report acreage below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Estimated total acres of forest conversion	31.8 acres	
If known, estimated acres ⁵ of forest conversion from April 1 to October 31	*See above	
If known, estimated acres of forest conversion from June 1 to July 31 ⁶	0	
Does the project include timber harvest? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of timber harvest		
If known, estimated acres of timber harvest from April 1 to October 31		
If known, estimated acres of timber harvest from June 1 to July 31		
Does the project include prescribed fire? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of prescribed fire		
If known, estimated acres of prescribed fire from April 1 to October 31		
If known, estimated acres of prescribed fire from June 1 to July 31		
Does the project install new wind turbines? (if yes, report capacity in MW below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated wind capacity (MW)		

Agency Determination:

By signing this form, the action agency determines that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

If the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project

⁴ Any activity that temporarily or permanently removes suitable forested habitat, including, but not limited to, tree removal from development, energy production and transmission, mining, agriculture, etc. (see page 48 of the BO).

⁵ If the project removes less than 10 trees and the acreage is unknown, report the acreage as less than 0.1 acre.

⁶ If the activity includes tree clearing in June and July, also include those acreage in April to October.

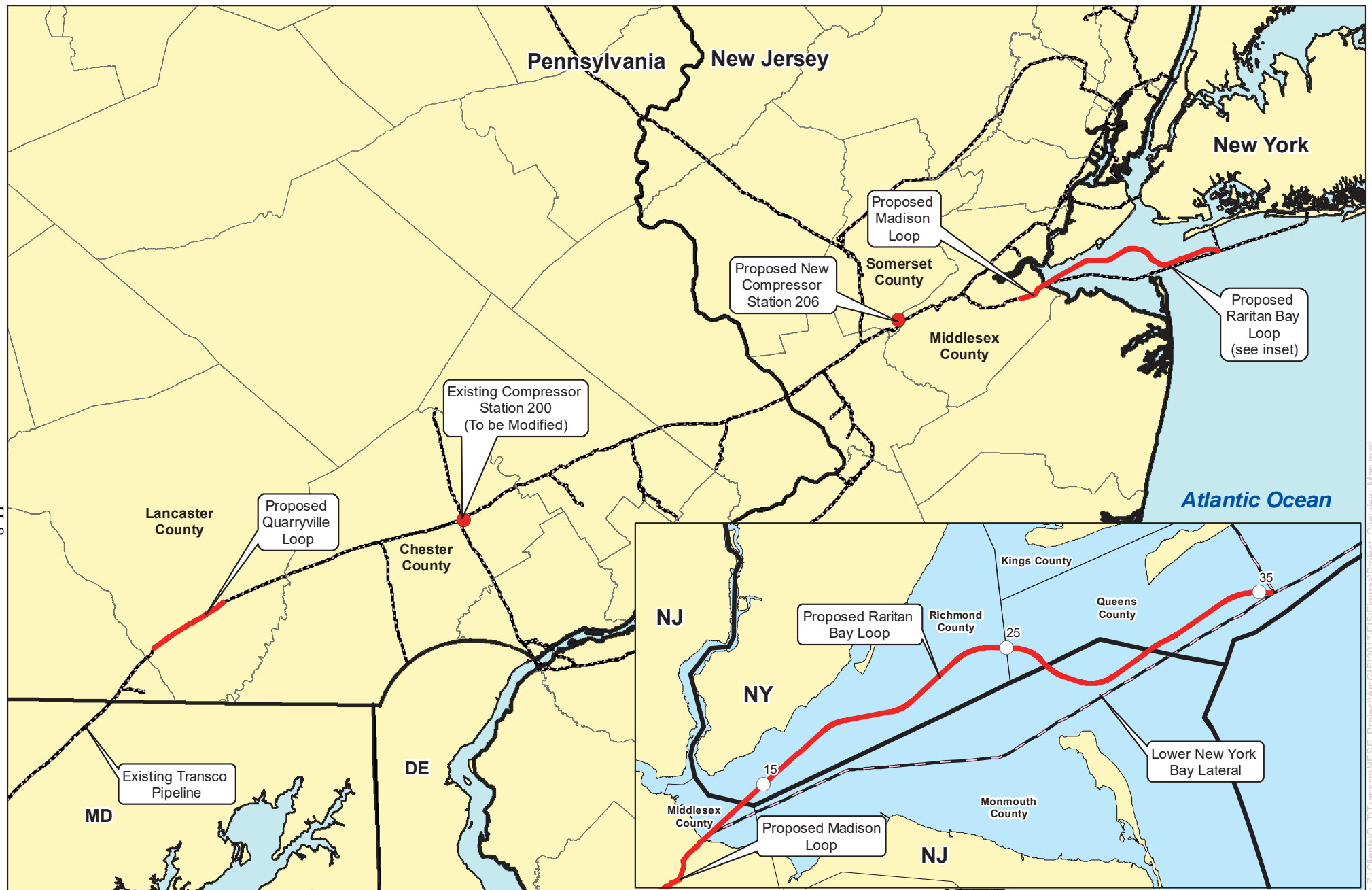
responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO. The action agency will update this determination annually for multi-year activities.

The action agency understands that the USFWS presumes that all activities are implemented as described herein. The action agency will promptly report any departures from the described activities to the appropriate USFWS Field Office. The action agency will provide the appropriate USFWS Field Office with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the appropriate USFWS Field Office upon finding a dead, injured, or sick NLEB.

Signature: Christie E. Allen

Date Submitted: 11/7/18

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For Environmental Review Purposes Only

Figure 1-1
Northeast Supply Enhancement Project
Project Overview Map

APPENDIX I

FINAL GENERAL CONFORMITY DETERMINATION



Federal Energy Regulatory Commission
Office of Energy Projects
Washington, DC 20426

Northeast Supply Enhancement Project

Final General Conformity Determination



Transcontinental Gas Pipe Line Company, LLC

Docket No. CP17-101-000

Cooperating Agencies:



**US Army Corps
of Engineers®**

**U.S. Army Corps
of Engineers**



**U.S. Environmental
Protection Agency**



City of New York

January 25, 2019

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1.0 INTRODUCTION

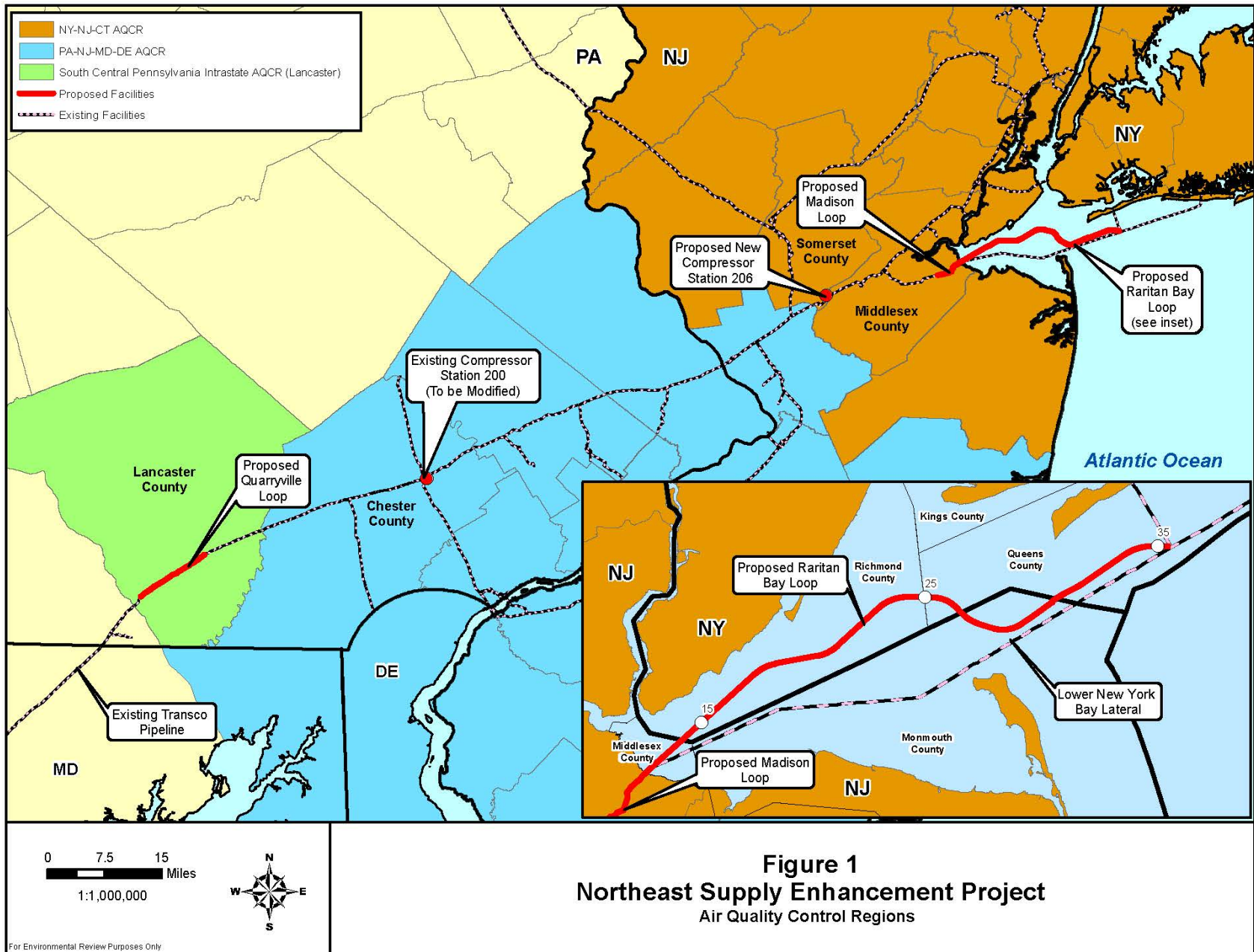
On March 27, 2017, Transcontinental Gas Pipe Line Company, LLC (Transco) filed an application with the Federal Energy Regulatory Commission (FERC) to expand its existing interstate natural gas transmission system in Pennsylvania, New Jersey, and New York. The Northeast Supply Enhancement (NESE) Project consists of the following proposed facilities:

- a 10.2-mile-long, 42-inch-diameter pipeline loop¹ in Lancaster County, Pennsylvania (Quarryville Loop);
- a 3.4-mile-long, 26-inch-diameter pipeline loop in Middlesex County, New Jersey (Madison Loop);
- a 23.5-mile long, 26-inch-diameter pipeline loop comprised of a 0.2-mile-long segment in onshore Middlesex County, New Jersey, and a 23.3-mile-long segment in the offshore waters of Middlesex and Monmouth Counties, New Jersey and Queens and Richmond Counties, New York (Raritan Bay Loop);
- an additional 21,000 horsepower of electric motor-driven compression at existing Compressor Station 200 in Chester County, Pennsylvania;
- a new 32,000 horsepower natural gas-fired compressor station in Somerset County, New Jersey (Compressor Station 206); and
- ancillary facilities including cathodic protection systems, new and modified mainline valves with tie-in assemblies, new and modified launcher/receiver facilities, and facilities to connect the Raritan Bay Loop to the existing Rockaway Delivery Lateral approximately 2.5 miles offshore of Rockaway, New York.

The NESE Project would provide about 400 million standard cubic feet of natural gas per day to Brooklyn Union Gas Company and KeySpan Gas East Corporation (collectively referred to as National Grid) to serve residential and commercial customers in the New York City area beginning in the 2020/2021 heating season.

Figure 1 illustrates the location of the proposed facilities.

¹ A pipeline “loop” is a segment of pipe constructed parallel to an existing pipeline to increase capacity.



2.0 GENERAL CONFORMITY – REGULATORY BACKGROUND

The U.S. Environmental Protection Agency (EPA) promulgated the General Conformity Rule on November 30, 1993 to implement the conformity provision of Title I, section 176(c)(1) of the Clean Air Act (CAA). Section 176(c)(1) states that any department, agency, or instrumentality of the federal government shall not engage in, support in any way or provide financial assistance for, license or permit, or approve, any activity which does not conform to an approved CAA implementation plan. The General Conformity Rule is codified in Title 40 Code of Federal Regulations (CFR) Part 93, Subpart B, “Determining Conformity of General Federal Actions to State or Federal Implementation Plans.”

The General Conformity Rule applies to direct and indirect air pollutant emissions associated with federal actions occurring in areas designated as nonattainment or maintenance with respect to the National Ambient Air Quality Standards (NAAQS). A “federal action” is defined in 40 CFR 93.152 as *“any activity engaged in by a department, agency, or instrumentality of the federal government, or any activity that a department, agency or instrumentality of the federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs and projects developed, funded, or approved under Title 23 U.S.C. or the Federal transit Act (49 U.S.C. 1601 et seq.). Where the “federal action” is a permit, license, or other approval for some aspect of a non-federal undertaking, the relevant activity is the part, portion, or phase of the non-federal undertaking that requires the federal permit, license or approval.”*

The EPA established the NAAQS to protect human health and welfare. Primary standards protect human health, including the health of sensitive subpopulations, such as children, the elderly, and those with chronic respiratory problems. Secondary standards set limits to protect public welfare, including protection against decreased visibility, and damage to animals, crops, vegetation, and buildings. NAAQS have been developed for sulfur dioxide (SO₂), particulate matter with a diameter of 10 microns or less (PM₁₀), particulate matter with a diameter of 2.5 microns or less (PM_{2.5}), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone, and lead, and include levels for short-term (acute) and long-term (chronic) exposures. However, ozone is not a pollutant directly emitted into the air. It is formed from a chemical reaction between oxides of nitrogen (NO_x) and volatile organic compounds (VOCs) in the presence of sunlight. Consequently, emissions of NO_x and VOCs are regulated as “precursors” to the formation of ozone. Similarly, sulfur oxides (SO_x), NO_x, and VOC are regulated as precursors to PM_{2.5}. NO_x is a combination of nitric oxide (NO) and NO₂. NO_x reacts with VOCs in the presence of sunlight to form ozone, and may also react with water and ammonia in the atmosphere to form nitric acid, which is a significant component of smog and acid rain. VOCs are organic compounds that have a high vapor pressure at ambient temperatures. VOCs are ubiquitous, and some examples are alcohols, solvents, methane, and ammonia.

2.1 General Conformity Requirements

Conformity under Title I, section 176(c)(1) of the CAA means to conform to an approved CAA implementation plan’s purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards. A federal action cannot:

- cause or contribute to new violations of any NAAQS in any area;
- increase the frequency or severity of any existing violation of any NAAQS in the area; or
- delay timely attainment of any NAAQS, interim emission reductions, or other milestones in the area.

The General Conformity Rule ensures that the emissions do not contribute to air quality degradation or prevent the achievement of state and federal air quality goals. The General Conformity Rule encourages federal agencies to consult with state and local air quality districts so that these regulatory entities are aware of the expected impacts of the federal action and can ensure the action meets the state implementation plan (SIP).

2.2 General Conformity Process

Air quality control regions (AQCRs) are areas established by the EPA and local agencies for air quality planning purposes, in which SIPs describe how the NAAQS would be achieved and maintained. The AQCRs are intra- and interstate regions, such as large metropolitan areas, where improvement of the air quality in one portion of the AQCR requires emission reductions throughout the AQCR. General Conformity refers to the process of determining and demonstrating whether a proposed action satisfies the requirements of an approved SIP. For the NESE Project, these would be the requirements for the South Central Pennsylvania Interstate AQCR, the Metropolitan Philadelphia Interstate AQCR, and New Jersey-New York-Connecticut (NJ-NY-CT) Interstate AQCR (see figure 1). The General Conformity process involves two distinct steps: applicability analysis and conformity determination.

The first step, an applicability analysis, assesses whether a proposed action is subject to the General Conformity Rule. An applicability analysis is required for any federal action in a nonattainment or maintenance area where the emissions associated with the action have the potential to exceed the applicability thresholds specified in 40 CFR 93.153(b)(1) and (2).

The second step, a conformity determination, is required if emissions associated with the federal action exceed the rates specified in 40 CFR 93.153(b)(1) and (2). The conformity determination assesses how the proposed action conforms to the applicable SIP(s). If emissions associated with the federal action do not exceed the applicability thresholds in the first step, a conformity determination is not required.

The General Conformity process exempts a review of new sources or existing source modifications that are subject to state or federal New Source Review (NSR) permitting. Under the General Conformity Rule, these sources are presumed to comply with the SIP by completing the applicable air permitting process with the jurisdictional agencies. The Pennsylvania Department of Environmental Protection (PADEP), New Jersey Department of Environmental Protection (NJDEP), and New York State Department of Environmental Conservation (NYSDEC) are the jurisdictional agencies for air permitting in their respective states. For the NESE Project, emissions resulting from operation of Compressor Station 206 have been permitted by the NJDEP and would not be subject to General Conformity.²

The FERC is the lead agency responsible for authorizing applications to construct and operate interstate natural gas facilities. The NESE Project is considered a federal action and the FERC is the lead agency responsible for making the General Conformity Determination. As required under General Conformity, an applicability analysis was performed to determine if the total direct and indirect emissions of criteria pollutants and precursors from the NESE Project in nonattainment or maintenance areas would exceed the rates specified in 40 CFR 93.153(b)(1) and (2). As detailed in Section 3.0 below, the NESE Project would exceed applicability thresholds in the NJ-NY-CT Interstate AQCR; therefore, a General Conformity Determination is presented in Section 4.0.

² The NJDEP issued a Preconstruction Permit for Compressor Station 206 on September 7, 2017.

3.0 GENERAL CONFORMITY APPLICABILITY

The General Conformity Rule applies only to actions in a nonattainment or maintenance area and the applicability thresholds apply for only those components of the NESE Project within the nonattainment or maintenance area. Each AQCR, or smaller portion within an AQCR (such as a county), is designated, based on compliance with the NAAQS, as attainment, unclassifiable, maintenance, or nonattainment, on a pollutant-by-pollutant basis. Areas in compliance or below the NAAQS are designated as attainment, while areas not in compliance or above the NAAQS are designated as nonattainment. Areas previously designated as nonattainment that have since demonstrated compliance with the NAAQS are designated as maintenance for that pollutant.

Table 3.0-1 summarizes the attainment status and applicability thresholds for the South Central Pennsylvania Intrastate, Metropolitan Philadelphia Interstate, and NJ-NY-CT Interstate AQCRs. Pennsylvania, New York, and New Jersey are also part of the Northeast Ozone Transport Region (OTR), which has specific applicability limits under General Conformity. The Northeast OTR consists of 13 northeastern states (including northern Virginia and Washington, D.C.), in which ozone transports from one or more states and contributes to a violation of the ozone NAAQS in one or more other states.

TABLE 3.0-1 NAAQS Attainment Status of Affected Counties				
Location/Project Component	AQCR	Ozone	PM _{2.5}	NO ₂ , PM ₁₀ , CO, SO ₂
Pennsylvania				
Quarryville Loop (Lancaster County)	South Central Pennsylvania Intrastate	Lancaster Co Marginal Ozone Nonattainment Area, Northeast OTR	Attainment (2012) Maintenance – moderate (2006 and 1997)	Attainment
Compressor Station 200 Modification (Chester County)	Metropolitan Philadelphia Interstate	Philadelphia-Wilmington-Atlantic City (PA-NJ-MD-DE) Marginal Ozone Nonattainment Area, Northeast OTR	Attainment (2012) Maintenance – moderate (2006 and 1997)	Attainment
New Jersey				
Madison Loop (Middlesex County)	NJ-NY-CT Interstate	NJ-NY-CT Ozone Nonattainment Area	Attainment (2012) Maintenance – former Subpart 1 (2006 and 1997)	Attainment
Compressor Station 206 (Somerset County)	NJ-NY-CT Interstate	NJ-NY-CT Ozone Nonattainment Area	Attainment (2012) Maintenance – former Subpart 1 (2006 and 1997)	Attainment
New Jersey/New York				
Raritan Bay Loop – Offshore	NJ-NY-CT Interstate	NJ-NY-CT Ozone Nonattainment Area	Attainment (2012) Maintenance – former Subpart 1 2006 and 1997) ^a	Attainment
^a Using nearest terrestrial county designation status.				
^b OTR: Ozone Transport Region.				

The NJ-NY-CT Interstate AQCR is currently designated moderate nonattainment for the 2008 and 2015 8-hour primary and secondary ozone NAAQS and is designated maintenance for the 2006 24-hour PM_{2.5} NAAQS. The EPA is reviewing a possible reclassification of this AQCR to serious ozone nonattainment. However, because this reclassification is not yet finalized, this final General Conformity Determination is based on the current designation. We³ note that although a reclassification to serious would lower the applicability thresholds under the General Conformity Rule, as shown below, the NESE

³ “We,” “us,” and “our” refer to the environmental staff of the Office of Energy Projects.

Project would exceed the higher General Conformity applicability thresholds under the moderate designation. As such, a reclassification would have no effect on this General Conformity Determination.

The South Central Pennsylvania Intrastate and Metropolitan Philadelphia Interstate AQCRs are designated marginal nonattainment with the 2008 and 2015 8-hour primary and secondary ozone NAAQS and are designated maintenance for the 2012 annual primary PM_{2.5} NAAQS. These AQCRs are also designated moderate nonattainment for the 1997 annual secondary NAAQS and 2006 24-hour primary and secondary PM_{2.5} standard NAAQS.

The General Conformity applicability thresholds are based on the attainment classification for each pollutant and presented in table 3.0-1. The ozone nonattainment and maintenance areas have applicability thresholds for NO_x and VOCs and the PM_{2.5} nonattainment and maintenance areas have applicability thresholds for SO_x, NO_x, and VOCs.

3.1 Emission Sources

As previously indicated, the General Conformity Rule excludes emissions by any permit issued under minor and major NSR from counting toward General Conformity applicability. Emissions sources that are subject to the General Conformity Applicability Analysis include the following construction emissions for the NESE Project:

- on-road vehicles – Emissions from commuter vehicles, passenger vehicles, and diesel and gasoline trucks;
- off-road construction vehicle traffic – Emissions from dump trucks, light/duty trucks, and water/fuel trucks;
- construction equipment – Emissions from air compressors, backhoes, cranes, pile driving, trenching, horizontal directional drilling equipment and other construction equipment;
- earthmoving activities – Emissions resulting from bulldozing, grading, and land disturbance;
- construction storage piles – Particulate matter emissions from active storage piles that would be used during construction;
- barges – Emissions from the transport of equipment and materials; and
- marine construction vessels – Emissions from offshore construction equipment (e.g., survey boats, barges, dredging equipment cranes, and tugboats).

In response to FERC information requests and agency consultation, Transco provided a revised Air Quality Technical Report (AQTR) on November 2, 2018, which included details on construction activities and associated emissions accounting for recent NESE Project updates, including changes in offshore construction methods and final burial depth requirements for the Raritan Bay Loop, among other updates.⁴

⁴ On December 28, 2017, Transco filed its initial AQTR, which provided details on construction activities and associated emissions. Transco filed updates to the initial AQTR Report on May 30, July 25, and August 21, 2018. Transco's November 2, 2018 AQTR, used as the basis for this final General Conformity Determination, can be found on the FERC website, <http://www.ferc.gov>, using the "eLibrary" link and the Docket Number CP17-101-000, Accession No. 20181102-5201.

Since issuance of the draft General Conformity Determination, Transco also revised its original plan to dredge the material needed to backfill the Raritan Bay Loop itself and now plans to purchase backfill material from a commercial vendor(s) with active permits to dredge navigation channels. Although Transco would not dredge the backfill material itself, the associated emissions from dredging, transporting, and placing the backfill material are considered an indirect impact of construction of the NESE Project and are not otherwise directly mitigated or included in the current New York State or New Jersey SIPs. Therefore, the emissions from dredging, transporting, and placing backfill material remain in the construction emissions estimates provided in the November 2, 2018 AQTR, and part of this General Conformity Determination.

The revised AQTR, used as the basis of this final General Conformity Determination, includes construction duration, equipment count and types required, hours of daily operation, vehicle miles traveled, and other information to support Transco's construction-related emission estimates. Construction equipment, on-road vehicles, and marine vessel activity for the NESE Project were estimated as a product of engine size (horsepower), engine-specific emission factors, operating load factors, and the estimated hours of equipment operation. Emission factors for off-road construction equipment were calculated using the nonroad model within the EPA MOVES2014a model populated with regionally specific equipment data. All off-road equipment and employee trucks were conservatively assumed to be diesel-fueled. For SO₂ and particulate matter emission factors, ultra-low sulfur diesel fuel was assumed for off-road construction equipment based on EPA regulations for sulfur-in-fuel effective June 2010. Indirect emissions from on-road mobile sources (e.g., commuter vehicles) were estimated based on the methodology and emission factors from the EPA MOVES2014a model populated with regionally-specific equipment data. Personal vehicles were assumed to be gasoline-fueled.

Marine vessel emissions were estimated using emission factors from the EPA's *Current Methodologies in Preparing Mobile Source Port-Related Emission Inventories*, published in April 2009. Transco provided a detailed account of all assumptions and calculations for the NESE Project construction emissions in its AQTR.

Emissions estimates for construction activities include, but are not limited to the following:

- onshore pipeline and compressor station construction;
- offshore pipeline construction;
- all marine vessel travel within 3 miles into international waters of the Atlantic Ocean;
- pipe and material transport within the NJ-NY-CT Interstate AQCR (including concrete mattresses and pipe segments);
- offshore backfill and dredge material transport activities (including dockside processing and transport to onshore facilities for disposal, where necessary);
- commuter and delivery vehicle travel within the AQCR;
- marine vessel diesel fuel containing 15 parts per million sulfur content; and
- horizontal directional drill (HDD) operations emissions, including the HDDs associated with the Long and Short CP Power Cables.

Since issuance of the draft General Conformity Determination, the U.S. Army Corps of Engineers (USACE) determined that the Raritan Bay Loop must be buried with a minimum of 15 feet of cover beneath federally maintained shipping channels including the Raritan Bay Channel and Chapel Hill Channel, and with at least 7 feet of cover in designated anchorage 28. The USACE has not made a final decision on whether it will allow Transco to dispose of some dredge material in the offshore Historic Area Remediation Site (HARS). Should the USACE not allow Transco to use the HARS, Transco has secured agreements to dispose of dredge material at two onshore locations in New Jersey owned by Clean Earth Dredging Technologies, LLC. The further distance of these two onshore locations in New Jersey from the construction area, compared to the HARS, would result in greater NO_x and PM_{2.5} emissions. Transco also remains in discussion with the NYSDEC regarding whether the NYSDEC would allow Transco to side-cast the material excavated in anchorage area 28 (MPs 24.0 – 24.9) and eastward of the second Neptune Cable crossing (MPs 35.2 – 35.5). Side-casting would avoid the emissions associated with raising, loading, and hauling the excavated material to either the HARS or an onshore location for disposal, but is only potentially available as a construction method in these areas of proposed clamshell excavation primarily due to water depth limitations on construction methods and/or the presence of contaminants in excess of NYSDEC Class C or high Class B criteria.

The only portion of the NESE Project impacted by the pending USACE and NYSDEC decisions would be the Raritan Bay Loop. All other NESE Project components would remain unchanged. In its August 21, 2018 AQTR, which provided the basis for the draft General Conformity Determination, Transco provided emissions for four distinct scenarios ranging from construction as proposed (lowest emissions scenario) to a worst case (highest emissions scenario). Each scenario differed depending on whether the USACE would allow use of the HARS for disposal of dredge material and whether the USACE would require the offshore pipeline to be buried at a depth of 7 or 15 feet in the areas referenced above. Since issuance of the draft General Conformity Determination, Transco revised its construction emissions scenarios for the Raritan Bay Loop to comply with the final USACE burial depth requirements and our environmental information request issued on October 23, 2018 issued, in part, to address changes in Transco's offshore construction methodologies, and the variation for side-casting. The description of each revised scenario is provided below. Each scenario assumes a 15-foot burial depth beneath the Raritan Bay Channel and Chapel Hill Channel, and a 7-foot burial depth in anchorage area 28 as required by the USACE. To-date, the USACE has not approved Transco to dispose of dredge material at the HARS. Therefore, the emissions scenarios vary based primarily on use of the HARS and/or upland dredge material disposal and approval or disapproval of side-casting in anchorage area 28 (MPs 24.0 – 24.9) and between MPs 35.2 – 35.5. All four scenarios also include construction of the other Project components (e.g., Quarryville Loop, Compressor Station 200, Madison Loop, and Compressor Station 206).

Scenario 1 (Worst-case)

Scenario 1 assumes a 15-foot depth of cover over the pipeline within navigation channels, a 7-foot depth of cover in anchorage area 28, and upland disposal of all dredge material, including the material from anchorage area 28 (i.e., HARS use is denied). No side-casting would occur in this scenario. This scenario represents the most conservative emissions estimates for the Raritan Bay Loop. After dockside processing and offload of upland-designated dredged material, the material would be transported by dump truck to upland disposal sites. The emissions calculations assumed 18 cubic yards per load, with trucks travelling a round trip distance of 200 miles (6 hours) to the disposal site and back. Scenario 1 would result in the following for the Raritan Bay Channel, Chapel Hill Channel, and anchorage area 28:

- all dredge material processed dockside and transported to designated onshore sites for a total of 477,578 cubic yards disposal including 290,470 cubic yards from the Raritan Bay Channel, 131,729 cubic yards from the Chapel Hill Channel, and 55, 379 cubic yards from anchorage area 28.

Scenario 2

Scenario 2 assumes a 15-foot depth of cover over the pipeline within navigation channels, a 7-foot depth of cover in anchorage area 28, disposal of all non-class C dredge materials from New York State waters in the HARS, and onshore disposal of dredge material for the remaining areas. No side-casting would occur in this scenario. Scenario 2 would require marine vessel transport and onshore trucking of sediment to the final onshore disposal sites for processing. Scenario 2 would result in the following for the Raritan Bay Channel, Chapel Hill Channel, and anchorage area 28:

- 317,531 cubic yards of dredge material from the Raritan Bay Channel disposed of in the HARS and 39,970 cubic yards sent to upland disposal sites;
- 120,960 cubic yards of dredge material from the Chapel Hill Channel disposed of in the HARS and 10,769 cubic yards sent to upland disposal sites;
- 44,490 cubic yards of dredge material from anchorage area 28 disposed of in the HARS and 10,889 cubic yards sent to upland disposal sites; and
- limited dredging rates used for upland designated dredge material.

Scenario 3

Scenario 3 assumes a 15-foot depth of cover over the pipeline within navigational channels, a 7-foot burial depth in anchorage area 28, and disposal of all non-class C dredge materials from New York State waters in the HARS, except for sediment derived from the Raritan Bay Channel, which would be processed and sent to designated onshore disposal sites. No side-casting would occur in this scenario. Scenario 3 would result in the following during construction of the Raritan Bay Loop for the Raritan Bay Channel, Chapel Hill Channel, and anchorage area 28:

- 290,470 cubic yards of dredge material from the Raritan Bay Channel sent to upland disposal sites;
- 120,960 cubic yards of dredge material from the Chapel Hill Channel disposed of in the HARS and 10,769 cubic yards sent to upland disposal sites;
- 44,490 cubic yards of dredge material from anchorage area 28 disposed of in the HARS and 10,889 cubic yards sent to upland disposal sites.

Scenario 4

Scenario 4 assumes a 15-foot depth of cover over the pipeline within navigational channels, 7-foot depth of cover within anchorage area 28, use of HARS for all non-class C dredge material except the Raritan Bay Channel, and side-casting of non-Class C dredge material in anchorage 28 and between MPs 35.2 – 35.5. Scenario 4 would be the least conservative scenario and would result in the following for the Raritan Bay Channel, Chapel Hill Channel, and anchorage area 28:

- 317,531 cubic yards of dredged material from the Raritan Bay Channel disposed of in the HARS and 39,970 cubic yards sent to upland disposal sites;
- 120,960 cubic yards of dredged material from the Chapel Hill Channel disposed of in the HARS and 10,769 cubic yards sent to upland disposal sites; and

- 44,490 cubic yards of non-Class C dredge material from anchorage area 28 would be side-cast with 10,889 cubic yards sent to upland disposal sites.

The assumptions underlying the four scenarios are summarized in table 3.1-1.

TABLE 3.1-1				
General Conformity Emissions Scenarios				
Scenario	USACE HARS Approval	HARS Approval Conditions	Side-casting Approved	Estimated NO _x Emission (tons)
Scenario 1 (Worst Case)	No	N/A	No	721.8
Scenario 2	Yes	All non-class C dredge	No	685.9
Scenario 3	Yes	All non-class C dredge except Raritan Bay Channel	No	695.7
Scenario 4	Yes	All non-class C dredge except Raritan Bay Channel	Yes	679.7

Once the USACE determines whether Transco is approved to use the HARS for dredge material disposal and the NYSDEC determines whether side-casting would be allowed across anchorage area 28 and between MPs 35.3 – 35.5, Transco would determine the final emissions scenario. Transco would ultimately be required to mitigate for whichever scenario is used. Therefore, this final General Conformity Determination evaluates the emissions that would occur under each scenario and demonstrates that any of the four scenarios that Transco may use would comply with the SIP. Further, because the USACE and NYSDEC have not made their respective decisions, **we recommend that the Commission include a condition to any authorization for the NESE Project that:**

- **Prior to construction, Transco should file with the Secretary of the Commission (Secretary), for review and written approval by the Director of the Office of Energy Projects (OEP), a final Construction Emissions Tracking Plan (CETP) and final Air Quality Mitigation Plan (AQMP) that specifically addresses the final General Conformity emissions scenario.**

We reviewed the AQTR and found the assumptions and methodology to estimate emissions for each scenario to be reasonable. The emissions estimates from this report are summarized below in tables 3-1.2, 3-1.3, and 3-1.4 alongside the General Conformity applicability thresholds.⁵

The emissions within each AQCR are summarized in tables 3.1-2 through 3.1-4, including the four emission scenarios, and are compared to the General Conformity applicability thresholds for each pollutant. Construction of the NESE Project would occur over a 2-year period (currently expected to be 2019 and 2020), with nearly all activities, including offshore construction, occurring in Year 2 and triggering General Conformity in the NJ-NY-CT Interstate AQCR only. Minor activities, such as equipment/material delivery and contractor yard staging, would occur in Year 1, but would not trigger General Conformity.

⁵ Detailed information on calculation methodology for each emission source is available in Transco's revised AQTR, filed November 2, 2018, which can be found on the FERC website, <http://www.ferc.gov>, using the "eLibrary" link and the Docket Number CP17-101-000, Accession No. 20181102-5201.

TABLE 3.1-2			
Quarryville Loop Construction Emissions and General Conformity Applicability Thresholds (South Central Pennsylvania Intrastate AQCR)			
Year	Pollutant	Construction Emissions (tpy)	General Conformity Applicability Threshold (tpy)
Year 1	NO _x	0.0	100
	VOC	0.0	50
	PM _{2.5}	0.0	100
	SO _x	0.0	100
Year 2	NO _x	59.4	100
	VOC	7.2	50
	PM _{2.5}	24.3	100
	SO _x	0.1	100
Note: The emissions for the South Central Pennsylvania Intrastate AQCR have been further refined since the August 2018 AQTR, resulting in minor changes to emissions within this AQCR.			

TABLE 3.1-3			
Compressor Station 200 Construction Emissions and General Conformity Applicability Thresholds (Metropolitan Philadelphia Interstate AQCR)			
Year	Pollutant	Construction Emissions (tpy)	General Conformity Applicability Threshold (tpy)
Year 1	NO _x	0.0	100
	VOC	0.0	50
	PM _{2.5}	0.0	100
	SO _x	0.0	100
Year 2	NO _x	17.8	100
	VOC	2.6	50
	PM _{2.5}	2.2	100
	SO _x	0.0	100
Note: The emissions for the Metropolitan Philadelphia Interstate AQCR have been further refined since the August 2018 AQTR, resulting in minor changes to emissions within this AQCR.			

TABLE 3.1-4 Madison Loop, Raritan Bay Loop, and Compressor Station 206 Construction Emissions and General Conformity Applicability Thresholds (NJ-NY-CT Interstate AQCR)						
Year	Pollutant	Scenario 1 Construction Emissions (tpy)	Scenario 2 Construction Emissions (tpy)	Scenario 3 Construction Emissions (tpy)	Scenario 4 Construction Emissions (tpy)	General Conformity Applicability Threshold (tpy)
Year 1	NO _x	1.8	1.8	1.8	1.8	100
	VOC	0.2	0.2	0.2	0.2	50
	PM _{2.5}	0.9	0.9	0.9	0.9	100
	SO _x	0.0	0.0	0.0	0.0	100
Year 2	NO _x	721.8	685.9	695.7	679.7	100
	VOC	42.9	36.3	38.8	38.2	50
	PM _{2.5}	80.4	52.4	63.9	63.2	100
	SO _x	42.3	47.6	45.4	44.5	100
Note: The General Conformity Applicability Threshold identified in this table reflects the current attainment status. A reclassification of this AQCR to serious would lower the NO _x applicability threshold to 50 tpy. However, as shown, all four scenarios would exceed the current 100 tpy threshold in Year 2 and would therefore all exceed the 50 tpy threshold. As such, a General Conformity Determination is needed under either applicability threshold.						

As shown in tables 3.1-2 and 3.1-3, direct and indirect emissions of NO_x, VOC, PM_{2.5}, and SO_x would be below applicable thresholds in the South Central Pennsylvania Intrastate and Metropolitan Philadelphia Interstate AQCRs. Therefore, in these locations, the second step, a General Conformity Determination, is not required.

The estimated emissions for VOC, PM_{2.5}, and SO_x in the NJ-NY-CT Interstate AQCR would also be below General Conformity thresholds under all four scenarios; therefore, the second step, a General Conformity Determination, is not required for these pollutants. However, we note that the estimated emissions of PM_{2.5} and VOC for the conservative “worst case” Scenario 1 are approaching the General Conformity applicability thresholds in Year 2, as shown in table 3.1-4. Transco would implement its CETP to track actual construction emissions of NO_x, and would also include tracking of PM_{2.5} and VOC.⁶ This information would be filed with FERC on a monthly basis. In addition, **we recommend that the Commission include a condition to any authorization for the NESE Project that:**

- **Transco should provide its CETP and reports directly to contacts at the EPA, NYSDEC, and NJDEP on a monthly basis during construction.**

We received a comment on the draft General Conformity Determination expressing concern that emissions from pile driving equipment, specifically from vibratory and/or diesel hammers, were not accounted for in Transco’s construction emissions. The pile drive hammers would be attached to a crane, which would be atop a barge, and emissions associated with crane and barge activity were included in Transco’s emission estimates. To ensure that all Project-related construction emissions are accounted for in the nonattainment area, **we recommend that the Commission include a condition to any authorization for the NESE Project that:**

- **Prior to construction, Transco should file with the Secretary, for review and written approval by the Director of the OEP, a final AQTR and CETP that include emissions**

⁶ The CETP can be found in appendix C of Transco’s AQMP filed November 2, 2018 (Accession No. 20181102-5201).

associated with the vibratory/diesel pile driving hammers and any other emission sources that may ultimately be used onsite during construction that are not currently anticipated.

We received comments from the NJDEP requesting that the EPA engine tier for marine vessels and construction equipment be included in the CETP. We agree that this is necessary. **Therefore, we recommend that the Commission include a condition to any authorization for the NESE Project that:**

- **Prior to construction, Transco should file with the Secretary, for review and written approval by the Director of the OEP, revised tables in attachment A of the CETP to include the EPA engine tier rating for marine vessels and construction equipment.**

Numerous commenters express concern that this determination is based on estimates of equipment types, age, number, and other factors. Per the General Conformity Determination regulations at 40 CFR §93.159, this analysis is to be “based on latest planning assumptions” and “based on the latest and most accurate emission estimation techniques available.” Further, under 40 CFR §93.157 (d), FERC would be required to re-evaluate and make a conformity determination for these pollutants if Transco’s actual total emissions are above those estimated and mitigated in this determination in comparison to the applicability thresholds.

The estimated NO_x emissions in the NJ-NY-CT Interstate AQCR in Scenarios 1 through 4 would exceed the applicability thresholds in Year 2. Therefore, a General Conformity Determination is included below to assess the NESE Project’s NO_x emissions conformance to the approved New York and New Jersey SIPs for Year 2.

4.0 GENERAL CONFORMITY

Under 40 CFR Part 93, Subpart B, “Determining Conformity of General Federal Actions to State or Federal Implementation Plans,” a federal action required to have a General Conformity Determination for a specific pollutant would be deemed to conform to the SIP if it meets one of several requirements in 40 CFR 93.158, “Criteria for Determining Conformity of General Federal Actions.”

The General Conformity Determination is based on the 8-hour ozone standard, the annual PM_{2.5} standard, and the corresponding attainment dates for the NJ-NY-CT Interstate AQCR. On November 10, 2017, the NYSDEC submitted the “New York State Implementation Plan for the 2008 Ozone National Ambient Air Quality Standards, NJ-NY-CT Nonattainment Area” to EPA for review and approval. The NYSDEC also requested reclassification of the area to serious nonattainment. As previously indicated, reclassification to serious ozone nonattainment would not change the General Conformity analysis because the NESE Project would exceed the higher General Conformity applicability thresholds under the moderate designation, requiring full NO_x mitigation. On September 25, 2018, the NYSDEC also submitted its proposed 2008 Ozone Transport SIP Supplement and 2015 Ozone Infrastructure SIP. The first SIP revision fulfills the infrastructure requirements for the 2015 ozone NAAQS pursuant to sections 110(a)(1) and 110(a)(2) of the Clean Air Act. The second SIP revision is a supplement to the infrastructure SIP for the 2008 ozone NAAQS submitted to EPA on April 4, 2013 regarding the transport obligations pursuant to CAA section 110(a)(2)(D)(i)(I), the “good neighbor” provision.

New Jersey and New York received maintenance designation for the 2012 annual PM_{2.5} NAAQS in 2013 and 2014, respectively. On January 2, 2018 New Jersey submitted a SIP revision for the 2017 Attainment Demonstration for 8-hour Ozone, which the EPA is currently reviewing. In this revision, New Jersey used 2011 as its base year, with a future projection year of 2017.

The proposed SIP revisions discussed in this section are under review by the EPA and have not been approved to-date. Transco would be subject to the provisions within the current, approved SIPs in both New Jersey and New York, and the proposed rules would not apply to the NESE Project. Therefore, this General Conformity Determination analyzes whether the NESE Project would conform under the current SIPs for New Jersey and New York.

4.1 General Conformity Determination

All of the emissions above the General Conformity applicability thresholds from construction of the NESE Project are expected to occur in the NJ-NY-CT Interstate AQCR in New York and New Jersey. The criteria for determining conformity are provided in 40 CFR 93.158. An action would be determined to conform for a specific pollutant if it meets the requirements of 40 CFR 93.158(c) and any of the applicable requirements in 40 CFR 93.158(a)(1) through (5). Section 40 CFR 93.158(c) requires the total of direct and indirect emissions from the action be in compliance with all relevant requirements and milestones contained in the applicable SIP. Section 40 CFR 93.158(a)(1) through (5) provide a number of pollutant-specific options for demonstrating conformity. The demonstration of conformance with the New York and New Jersey SIP requirements, in accordance with 40 CFR 93.158(c), is provided in Section 4.1.1 of this document, and the demonstration of conformance with ozone precursors under 40 CFR 93.158(a)(2), is provided in Section 4.1.2 of this document.

4.1.1 Consistency with Relevant New York and New Jersey SIP Requirements

The NO_x emission control measures and regulations included in the New York and New Jersey SIPs that may potentially apply to the NESE Project and related activities are listed in table 4.1-1. The New York Code of Rules and Regulations and New Jersey Administrative Code contain regulations that could potentially apply to construction of the NESE Project. In addition, the New York State and New Jersey SIP revisions can be found on the NYSDEC website⁷ and the NJDEP website.⁸

⁷ Potentially applicable air quality regulations in the New York Code of Rules and Regulations can be found at <http://www.dec.ny.gov/regs/2492.html>. New York SIP revisions can be found on the NYSDEC website at <http://www.dec.ny.gov/chemical/8403.html>.

⁸ Potentially applicable air quality regulations in the New Jersey Administrative Code can be found at <https://www.state.nj.us/dep/aqm/rules27.html>. New Jersey SIP revisions can be found at <https://www.state.nj.us/dep/baqp/sip/siprevs.htm>.

TABLE 4.1-1 Control Measures in the New York and New Jersey State Implementation Plans		
Emission Control Measures, Fuel Standards, and Regulations	Type	Potential Applicability to the NESE Project
EPA Non-road Diesel Engines (greater than 50 horsepower) Rule	Federal	Construction equipment
Emissions Standards for Large Spark Ignition Engines (over 19 kilowatts)	Federal	Construction equipment
Enhanced Inspections/Maintenance	Federal	Delivery and commuter vehicles
Federal Tier 1 and 2 Vehicle Standards	Federal	Delivery and commuter vehicles
Tier 3 Vehicle Emission and Fuel Standards Program	Federal	Commuter cars and trucks
National Low Emission Vehicle Standards	Federal	Delivery and commuter vehicles
Heavy Duty Diesel Engine Rule	Federal	Construction and heavy duty on-road vehicles
Emission standards and certification requirements for Tier 3 and Tier 4 marine diesel engines	Federal	Marine diesel construction engines
Control of Emissions from Tier 2 and Tier 3 Nonroad Diesel Engines	Federal	Nonroad construction, some marine
Diesel Marine Engines over 37 kilowatts (Tiers 1, 2, and 3)	Federal	Offshore construction vessels
Idling Prohibition for Heavy Duty Vehicles	State - NY	Potentially applicable to Project-related vehicles
Low Emission Vehicle Program	State - NJ	Potentially applicable to Project-related vehicles
	State - NY	
Three-minute idling limit	State - NJ	Potentially applicable to Project-related vehicles
Diesel Idling Rule	State - NJ	Potentially applicable to Project-related vehicles (on-road)
Diesel Smoke Rule	State - NJ	Potentially applicable to Project-related vehicles
Vehicle Inspections	State - NY	Potentially applicable to Project-related vehicles
	State - NJ	

Several of the emission control measures and regulations identified in table 4.1-1 would indirectly affect the emissions from the NESE Project through implementation of standards for manufacturers (such as reformulated fuel and engines). Construction equipment and delivery/commuter vehicles would be powered by engines that are subject to these programs. Implementation and compliance with these programs would be required by the manufacturers and refiners; not Transco. Therefore, the NESE Project meets the requirements of 40 CFR 93.158(c) for complying with all relevant requirements and milestones contained in the applicable SIPs.

4.1.2 NJ-NY-CT Interstate Air Quality Control Region NO_x Mitigation/Offsets

This determination addresses conformance under the worst-case scenario. By demonstrating conformance with the worst-case scenario, if any of the other scenarios are ultimately used, they would result in lower emissions needing to be mitigated and would therefore, similarly conform. The NESE Project could result in up to 721.8 tons of NO_x emissions during one year of construction under Scenario 1, the worst case construction emissions estimate. To demonstrate conformance under 40 CFR 93.158(a)(2), Transco has proposed two mitigation strategies, which we evaluate in a tiered approach based on type. We note that both mitigation strategies described below are acceptable methods of demonstrating conformance under the General Conformity regulations. The two tiers are as follows:

Tier 1 – Direct Mitigation – Transco would prioritize sponsoring mitigation projects within the NJ-NY-CT Interstate AQCR to offset the total direct and indirect estimated NO_x emissions during construction of the NESE Project. These mitigation projects must be implemented such that they can generate reductions in applicable emissions prior to construction of the NESE Project. Transco indicated that it may explore implementing its proposed mitigation projects on an alternate timeline. The use of an

alternate timeline would require approval from the states and a greater than 1 to 1 offset ratio; however, the states have not agreed to an alternate timeline at this time.

Tier 2 – ERC Purchases – This approach would require Transco to purchase Emission Reduction Credits (ERCs) for the construction year in which the General Conformity Rule would be triggered and certify the transfer of ERCs with the applicable state agencies. The ERCs could be immediately creditable for the NESE Project and could, therefore, be purchased at any time prior to construction.

It is important to understand that air quality mitigation is not an exact science like, for example, wetlands mitigation. If a project requires the mitigation of a specific number of impacted acres of wetlands, it is understood that the exact same number of acres of wetlands in another area must be secured, or that there are established habitat evaluation measures that determine the value of the loss and its replacement. For air emissions, a different approach must be taken for any mitigation strategy due to the variability of the source itself, the mitigation alternative, and the potential for operational changes that could suddenly render a strategy ineffective. Therefore, responsible air mitigation should include a combination of strategies that not only meet the target reduction goal, but also exceed that target. By doing so, if any of the strategy risks are realized, the schedule would not be impacted. In addition, a mitigation plan should have contingency measures such that if a primary strategy fails there is a secondary (contingency) strategy that can be engaged within such a time so as to not cause a schedule delay.

4.1.2.1 Tier 1 – Direct Mitigation

The proposed mitigation projects must generate offsets concurrently with the year in which General Conformity would be triggered; therefore, the direct mitigation projects would need to be completed and operational prior to the start of construction for the NESE Project. Table 4.1-2 contains the list of proposed mitigation projects that could be implemented and begin generating offsets prior to construction of the NESE Project.

Transco provided a list of direct mitigation projects it is pursuing and a corresponding ranking of their feasibility in its November 2, 2018 AQMP.⁹ A “high” ranking signifies that Transco considers the mitigation project to be feasible based on available information regarding technical elements and believes it could be implemented prior to starting construction to then generate offsets in the triggered year. A “medium” ranking signifies that the mitigation project is potentially feasible, but either the project information or timing needs to be confirmed. A low” ranking signifies the mitigation project may be improbable due to project timing and available equipment, or minimal reduction opportunities at a higher cost impact. Due to their uncertainty, low ranked mitigation projects are not included for consideration in this General Conformity Determination. However, if they become more viable or certain, Transco may use these mitigation projects to generate the required offsets. Based on this ranking system, we present all “high” and “medium” ranked projects that could be implemented prior to construction of the Raritan Bay Loop below in table 4.1-2 and appendix A.

⁹ Available on FERC’s eLibrary website at <https://ferc.gov/docs-filing/elibrary.asp>, Accession No. 20181102-5201.

State	Mitigation Project (no. of Units)	Start Date - End Date	Estimated NO _x Reduction (ton/unit)	Potential NO _x Reductions Realized in 2020	Total Potential NO _x Reduction
NY NJ	NJ Motor Trucking Association - Port Authority of New York and New Jersey Truck Replacement Program (450)	2019-2020	0.6	271	271
NY NJ	Other Independent Trucking Companies using the Port Authority of New York and New Jersey Truck Replacement Program (550)	2019-2020	0.6	332	332
NJ	NJ TRANSIT Bus Electrification (15)	2019-2020	1.44	21.7	21.7
NJ	NJ TRANSIT Support Systems for New Dual Mode Locomotives (17)	2019-2020	35	281	598 ^a
^a This project has the potential for additional reductions that would be realized beyond 2020. However, an alternative timeline would be required and has not been approved by the state.					

On December 6, 2018, Transco filed an executed Memorandum of Agreement (MOA) with the New Jersey Motor Trucking Association for the Truck Replacement Program mitigation project.¹⁰ This MOA includes a requirement that trucks replaced under the program are scrapped to ensure they will not be able to re-enter the AQCR. This MOA fulfills our requirement that Transco ensure that mitigation projects are available for funding, represent true emissions reductions, and would be implemented and begin generating offsets prior to the start of construction. Transco also continues to work towards execution of an MOA with the NJ TRANSIT for the Bus Electrification and Support Systems for New Dual Mode Locomotives mitigation projects.

One commenter notes that the General Conformity regulations require that the federal agency making the conformity determination obtain written commitments from the appropriate persons or agencies to implement any mitigation measures which are identified as conditions for making conformity determinations, prior to determining that a federal action is in conformity. Transco has a written commitment, MOA, which can mitigate over 600 tons of NO_x. However, as noted above, Transco has proposed two mitigation strategies, to include the purchasing of emission reduction credits. As discussed below, the second mitigation strategy is also effective to cover any portion or the whole project's emissions.

For each mitigation project, Transco provided NO_x offset calculations, which have been revised based on EPA comments. In its previous versions of the AQMP, Transco modeled drayage trucks in MOVES 2014a as combination long-haul trucks, which assumes overnight hoteling, when they should have been modeled as short-haul trucks (no overnight hoteling assumption). Transco has since revised the modeling parameters to model drayage trucks as short-haul trucks and provided the results in its November 2, 2018 AQMP. We have reviewed the revised AQMP and find it acceptable. Detailed calculations can be found in appendix A.

¹⁰ The details of the NJ TRANSIT MOA can be found on the FERC's eLibrary website at <https://ferc.gov/docs-filing/elibrary.asp>, Accession No. 20181206-5324.

4.1.2.2 Tier 2 – Emission Reduction Credit Purchases

Because the NO_x offsets that would be realized from the high and medium ranked mitigation projects listed in 4.1.2.1 are not enough to cover NO_x emissions for construction of the NESE Project in Year 2, ERCs and Creditable Emissions Reductions (CERs) within the NJ-NY-CT Interstate AQCR would need to be purchased.

An ERC, according to the NYSDEC, is the actual decrease in emissions of a regulated NSR contaminant, in tons per year. In New Jersey, a CER serves the same function as an ERC. An ERC or CER represents a permanent, quantifiable, federally enforceable surplus reduction of emissions that has or will have resulted from a physical or operational change of an emission source subject to NSR (or a non NSR facility subject to approval). In short, ERCs and CERs are emissions that have been retired by existing facilities and are available for purchase to offset future projects.

Based on publicly available information from the NYSDEC¹¹ and NJDEP,¹² there are enough ERCs and CERs available to completely offset the NO_x emissions from the NESE Project.

According to 6 CRR-NY 231-5.5(c), in order to use an ERC for NO_x or VOC emissions, the ERCs must have physically occurred on or after November 15, 1990, but need not be contemporaneous. According to the Title 6, Chapter III, part 231-5.5(e) of the New York Code of Rules and Regulations Code of Rules and Regulations (6 CRR-NY 231-5.5), an offset of NO_x or VOC in an ozone nonattainment area for a new or modified source must: (1) be obtained from the same ozone nonattainment area, or (2) be obtained from other ozone nonattainment areas of equal or higher (i.e., more severe) classification if emissions from that area contributes to a violation of the NAAQS for ozone in the nonattainment area where the new or modified facility would be located. This includes another state in the ozone transport region where an interstate reciprocal trading agreement is in place. The “other” ozone nonattainment area must be upwind and directly contribute to violation of the NAAQS in the NJ-NY-CT Intrastate AQCR. The NYSDEC *Guidelines on Dispersion Modeling Procedures for Air Quality Impact Analysis* may be used by an applicant to perform a case-specific contribution demonstration.

New Jersey maintains a list of its CERs for the Northern New Jersey nonattainment area (within the NJ-NY-CT Interstate AQCR). The NJDEP maintains similar rules regarding upwind offsets to those of New York State. Upon approval of CERs from another state, the discount timing commences. If CERs are not used within 5 years, a 50 percent discount is applied. CERs older than 10 years expire and cannot be used.

Transco conducted research to identify ERCs and CERs available for purchase in the NJ-NY-CT Interstate AQCR. It identified a sufficient number of ERCs and CERs exist to fully cover its NO_x construction emissions. Because Transco’s Tier 1 strategy falls short of achieving complete NO_x mitigation (i.e., no net increase of NO_x emissions), Transco would supplement the NO_x shortfall by purchasing ERCs and CERs, as described in the Tier 2 strategy. Transco would purchase ERCs and CERs up to the full amount of estimated NO_x construction emissions based on the final emission scenario to be used for the NESE Project within the NJ-NY-CT Interstate AQCR (up to 721.8 tons per year, Scenario 1). Transco would use a combination of Tier 1 and Tier 2 mitigation strategies, as needed, to achieve conformity.

¹¹ Publicly available information on ERCs in New York State can be found at <http://www.dec.ny.gov/chemical/8564.html>. The ERC registry, available at http://www.dec.ny.gov/docs/air_pdf/ercsregistry.pdf, provides detailed information on ERCs.

¹² New Jersey’s Banked Emissions Credits can be found on NJDEP’s website at <https://www.state.nj.us/dep/aqpp/bec.html> in the “Summary Report, Totals for New Jersey (Northern and Southern Areas).”

We have reviewed Transco's identified ERCs and CERs available for purchase and determined there are sufficient ERCs and CERs available to mitigate the worst-case construction emissions scenario (721.8 tons of NO_x) and find this method of conformance acceptable.

4.1.3 Finding of Conformity

We have determined that the NESE Project would achieve conformance with the New York and New Jersey SIPs with respect to the NJ-NY-CT Interstate AQCR through compliance with the requirements of 40 CFR 93.158(a)(2) and 40 CFR 93.158(c).

Although direct mitigation is Transco's first tier mitigation strategy, we expect a portion of the NESE Project NO_x construction emissions would be mitigated through the purchase of ERCs and CERs. Should Transco's negotiations with the proposed mitigation project proponents stall and become unavailable or unusable within the desired timeframe to meet Transco's obligations under General Conformity, Transco would purchase ERCs and CERs to fully cover the final emissions scenario based on agency permitting for the estimated construction emissions of NO_x. EPA, NJDEP, and NYSDEC commented on the draft General Conformity Determination emphasizing their preference that Tier 1, direct mitigation, be utilized over Tier 2, the purchase of ERCs or CERs. Generally, we agree that the Tier 1 direct mitigation strategy is preferred. However, there are insufficient high and medium ranked direct mitigation projects that would generate offsets prior to construction to fully offset construction emissions NO_x. In particular, the draft General Conformity Determination identified a direct mitigation project with NJ TRANSIT to replace locomotive engines. However, upon further coordination, this direct mitigation project could not be completed before construction of the Raritan Bay Loop. Transco identified that this project would require an allowance under the General Conformity regulations to offset emissions over a 2-year timeframe. Under the regulations, use of an alternative timeline to offset emissions requires approval by the applicable state agency. During early consultation in a December 12, 2017 meeting with the EPA, Transco, and state agencies, NJDEP and NYSDEC indicated reluctance to provide approval to use an alternative timeline prior to issuance of the General Conformity Determination, which FERC would require to ensure the use of an alternate timeline was an acceptable method of conformance. Although this additional direct mitigation project with NJ TRANSIT would meet the EPA and states' preferred method of conformance, we no longer consider it practical because the state agencies have not approved the use of an alternative timeline.

NJDEP also noted that, for past projects, ERCs/CERs were only used to address technical delays, schedule changes, and to prevent shutdowns. The use of ERCs/CERs is an acceptable method of conformance under the General Conformity regulations, and may be the sole method of conformance. FERC has issued multiple general conformity determinations where the primary method of conformance was the purchase of ERCs. ERCs/CERs may also be used to address technical delays, schedule changes, or to prevent shutdowns.

Transco has provided a preliminary Mitigation Project Emissions Tracking Plan (MPETP)¹³ to track, quantify, and verify that emissions reductions are achieved.¹⁴ The emissions reductions would be

¹³ The MPETP can be found in appendix D of Transco's AQMP filed November 2, 2018 (Accession No. 20181102-5201).

¹⁴ A sample fleet spreadsheet that records details on both the current and replacement engines can be found on EPA's website at <https://www.epa.gov/sites/production/files/2018-04/fy18-afd-sample.xlsx>. Sample guidelines on drayage truck replacement can be found on EPA's website at <https://www.epa.gov/sites/production/files/2018-04/documents/fy18-drayage-truck-sample-guideline.pdf>.

tracked and filed with FERC on a monthly basis. **We recommend that the Commission include a condition to any authorization for the NESE Project that:**

- **Prior to construction, Transco should file with the Secretary, for review and written approval by the Director of OEP, a final MPETP that includes specific details regarding the data to be collected for each vehicle/engine replacement using guidelines and resources from EPA's Clean Diesel Grant Program.**
- **Transco should also provide the MPETP and reports directly to contacts at the EPA, NYSDEC, and NJDEP on a monthly basis during construction.**

In addition, Transco would implement its CETP, as recommended in FERC staff's final Environmental Impact Statement. The CETP would track actual emissions of NO_x, VOC, and PM_{2.5} during construction, the results of which would be filed with FERC on a monthly basis. Should the proposed mitigation projects not generate enough offsets during the target year, we have verified that there are sufficient ERCs available within the NJ-NY-CT AQCR to offset Transco's total estimated "worst case" NO_x emissions, and Transco has committed to purchasing ERCs, if necessary, to ensure that the NESE Project would conform to the New York and New Jersey SIPs. Therefore, FERC staff have determined that offsetting emissions through mitigation and/or ERCs and CERs is a viable approach to demonstrate conformance. To ensure that Transco identifies the final emissions scenario and appropriately tracks and mitigates the associated emissions, **we recommend that the Commission include a condition to any authorization for the NESE Project that:**

- **Prior to construction, Transco should file with the Secretary, for review and written approval by the Director of OEP, a final MPETP that specifically addresses the final General Conformity emissions scenario.**

Per the requirements outlined in 40 CFR 93.160, **we recommend that the Commission include a condition to any authorization for the NESE Project that:**

- **Prior to construction, Transco should file with the Secretary documentation confirming that Transco's mitigation projects are in place and/or that it has purchased ERCs and CERs to offset all estimated construction emissions of NO_x within the NJ-NY-CT Interstate AQCR.**

For Tier 1 NO_x mitigation, staff would ensure that direct mitigation projects would be completed and operational (generating emission offsets) prior to issuing a *Notice to Proceed with Construction* of the NESE Project. Similarly, for Tier 2 NO_x mitigation, staff would ensure that the ERCs and CERs have been certified and approved by the state(s) prior to construction. Should Transco's emission tracking reveal that emissions of any additional criteria pollutant exceed the applicable General Conformity threshold (where it was previously below) or if actual emissions of NO_x exceed estimates by an additional general conformity threshold amount, FERC would be required to issue a new General Conformity Determination for the additional emissions. Further, we reserve the right to issue a stop work order until the NESE Project construction emissions comply with the General Conformity Determination herein.

Based on our review of the NESE Project and estimated air emissions, and after consultation with EPA Region 2, the NJDEP, and the NYSDEC, we conclude that the NESE Project will achieve conformity in New Jersey and New York through compliance with 40 CFR 93.158(a)(2) and 40 CFR 93.158(c).

Appendix A

Mitigation Project Calculations

Transco has been working with local partners to develop a list of potential projects within the NJ-NY-CT Interstate AQCR to meet its obligations under General Conformity. Although Transco considered a list of projects which it ranked “high,” “medium,” and “low,” we have presented, only the “high” ranked projects considered feasible mitigation options for the NESE Project construction emissions. Project ranking criteria includes implementation ability, project timing, and cost. Lower rankings present too great an uncertainty of implementation.

TABLE 1					
Summary of Proposed Direct Mitigation Projects					
State	Mitigation Project (no. of units)	Start Date - End Date	Estimated NO _x Reduction (ton/unit)	Estimated Total NO _x Reduction	Potential NO _x Reductions Realized in 2020
NY NJ	NJ Motor Trucking Association - Port Authority of New York and New Jersey Truck Replacement Program (450)	2019 – 2020	0.6	271	271
NY NJ	Other Independent Trucking Companies using the Port Authority of New York and New Jersey Truck Replacement Program (550)	2019-2020	0.6	332	332
NJ	NJ TRANSIT Bus Electrification (15)	2019-2020	1.44	21.7	21.7
NJ	NJ TRANSIT Support Systems for New Dual Mode Locomotives (17)	2019-2020	35	598	281

The Port Authority of New York and New Jersey Truck Replacement Program

The Port Authority of New York and New Jersey (Port Authority) has an existing Truck Replacement Program (TRP) that provides both grants and financial assistance to eligible truck owners to purchase new and more fuel-efficient trucks. This proposed mitigation project would be separate from the existing TRP. The trucks targeted for potential replacement are drayage trucks from model years from 1996 to 2006 that transport goods over a short distance at ports. Under this program, the drayage trucks would be replaced with those of model year 2011 or newer. Based on information from the New Jersey Motor Trucking Association, Transco estimates the replacement of 450 drayage trucks traveling 45,000 miles/year each. The EPA requested that engines replaced under the Truck Replacement Program be scrapped to prevent re-entry into the NJ-NY-CT Interstate AQCR. On December 6, 2018, Transco filed an executed Memorandum of Agreement (MOA) with the New Jersey Motor Trucking Association for the Truck Replacement Program mitigation project. This MOA included a provision that trucks replaced under the program be traded in at an authorized dealer to be scrapped to ensure that replaced equipment would no longer generate emissions in the NJ-NY-CT Interstate AQCR.

Example Emission Calculation for Drayage Trucks

On-road exhaust emissions for the drayage trucks are calculated by multiplying the total vehicle miles traveled by the emission factors for the current and replacement trucks generated using EPA MOVES2014a.

Equation 1

$$NO_x \text{ Emissions (tons)} = \frac{EF_{OR} * Total \ VMT}{907,185 \frac{gram}{ton}}$$

EF_{OR} = On-Road Emission Factor generated using EPA MOVES2014a

Total VMT = Total Vehicle Miles Traveled per vehicle type

Total vehicle miles traveled are calculated by taking the quantity of vehicle type (drayage trucks) estimated to be replaced and multiplying it by the estimated miles traveled per year. The drayage trucks to be replaced are assumed to be heavy-duty diesel trucks of model year 2003 using diesel fuel, to be replaced by model year 2011 trucks.

Assumptions:

Number of trucks used by PANYNJ	450	trucks
Average mileage for any truck ¹	45,000	miles/yr

1. Assumed average annual operation (mileage) of trucks to be replaced

MOVES2014a generated Emission Factors¹

Truck Type	NOx Emission Factor (g/mi)	
	Model Year 2003	Model Year 2011
Combination Short-haul Trucks (Diesel)	13.0	0.89

1. Emission Factors for trucks are from USEPA MOVES2014a.

Potential Emissions/Reductions: Replacement of 2003 Model Year Truck with 2011 Model Year Truck

MOVES Emission Factors	Pollutant	NOx Emission Factor by Truck Model Year (g/mi)		mi/yr per truck	Single Truck Model Year 2003 Emissions (tpy)	Replacement Single Truck Emissions Model Year 2011 (tpy)	Single Truck Emissions Savings (tpy)	Total Emissions Savings for 450 trucks (tpy)
		2003 ¹	2011 ²					
Combination Short-haul Trucks (Diesel)	NOx	13.0	0.89	45,000	0.65	0.04	0.60	271

1. Emission Factors for 1998-2003 model year trucks are based on EPA Emission Factors for Heavy Duty Highway CI Engines

2. Emission Factors for trucks are from USEPA MOVES2014a.

Truck Replacement Program – Other Independent Trucking Companies

The Independent Trucking Companies TRP is similar to that of the NJ Motor Trucking Association TRP. The program provides both grants and financial assistance to eligible truck owners to help purchase new and more fuel-efficient trucks. The trucks that may potentially be replaced are drayage trucks which transport goods over a short distance. Per the PANYNJ TRP, "Independent owner operators or licensed motor carriers that own port drayage trucks with engine model years 1996-2003 that frequently serve the port, which is defined as at least 150 times in the last 12 months, and who agree to continue to service the port frequently with the replacement truck for five years. Replacement trucks must have engines with engine model year 2011 or newer and certified to EPA emission standards. Transco anticipates that 550 units would be replaced as part of the mitigation project. See equation 1 for an example emission calculation for drayage trucks.

Assumptions:

Number of trucks used by PANYNJ	550	trucks
Average mileage for any truck ¹	45,000	miles/yr

1. Assumed average annual operation (mileage) of trucks to be replaced per correspondence with the Executive Director, NJ Motor Truck Association.

MOVES2014a generated Emission Factors¹

Truck Type	NOx Emission Factor (g/mi)	
	Model Year 2003	Model Year 2011
Combination Long-haul Trucks (Diesel)	13.0	0.89

1. Emission Factors for trucks are from USEPA MOVES2014a run in January 2018.

Potential Emissions/Reductions: Replacement of 2003 Model Year Truck with 2011 Model Year Truck

MOVES Emission Factors	Pollutant	NOx Emission Factor by Truck Model Year (g/mi)		mi/yr / truck	Single Truck Model Year 2003 Emissions (TPY)	Replacement Single Truck Emissions Model Year 2011 (TPY)	Single Truck Emissions Savings (TPY)	Total Emissions Savings for 550 trucks (TPY)
		2003 ¹	2011 ²					
Combination Long-haul Trucks (Diesel)	NO _x	13.0	0.89	45,000	0.65	0.04	0.60	332

1. Emission Factors for 1998-2003 model year trucks are based on EPA Emission Factors for Heavy Duty Highway CI Engines

2. Emission Factors for trucks are from USEPA MOVES2014a run in January 2018.

NJ TRANSIT: BUS REPLACEMENT

The NJ TRANSIT is proposing to replace a portion of their existing bus fleet with new electrified buses. To date, NJ TRANSIT has announced that it plans to purchase a number of new buses for local service. Each replaced bus would potentially result in a savings of 1.44 ton per unit of NO_x, for a total potential NO_x offset of 21.7 tons for 15 buses. As part of the mitigation project selection process, contractual agreements would be used to verify that retired vehicles are not reused within the AQCR.

Potential Bus Emissions/Reductions							
Case	NO _x Emission Factor (g/hp-hr) ¹	HP ²	Hours of Operation (hrs/yr) ³	Current Single Bus Emissions (tpy)	Electrified Single Bus Emissions (tpy) ⁴	Single Bus Emissions Savings (tpy)	Total Bus Emissions Savings for 15 buses (tpy)
2010 NABI Cummins-powered Buses	1.2	240	4,380	1.44	0.00	1.44	21.7

1. The emission factor generated in USEPA MOVES2014a (5.8 grams/mile) was converted to grams/hp-hr using USEPA's *Update Heavy-Duty Engine Emission Conversion Factors for MOBILE6: Analysis of BSFCs and Calculation of Heavy-Duty Engine Emission Conversion Factors*. The lowest emission factor for weekday operation of an urban bus was used.

2. Assumed a 240 HP engine based on typical bus in similar bus fleet

3. The hours of operation are assumed to be 12 hours per day for 365 days per year.

4. Assumes switching of bus from diesel fuel to electric provides 100% emissions reduction benefit.

Example Emission Calculation for Bus Replacement

Equation 3

$$NO_x \text{ Emissions (tons)} = \frac{EF_{BE} * HP * Total \text{ Work Hours}}{907,185 \frac{gram}{ton}}$$

EF_{BE} = On-Road Emission Factor generated using EPA MOVES2014a

HP = Horsepower

Total Work Hours = Total estimated annual hours of operation operating 12 hours per day and 365 days per year

Preliminary calculations assume an estimated power rating of 240 hp for existing engines. It is assumed that the electrified buses would not emit NO_x.

NJ TRANSIT: Support System for New Dual Mode Locomotives

In December 2017, the NJ TRANSIT system exercised an option to purchase 17 modernized ALP-45DP locomotives, which will replace NJ TRANSIT's aging fleet of GP40 locomotives manufactured in the 1960s. The ALP-45DP can operate under both diesel and alternating current electric power. The ALP-45DPs will meet the current EPA Tier 4 requirements, reducing emissions when operating in diesel mode, as compared to the locomotives to be replaced, and producing no emissions when operating in electric mode. The existing locomotive engines are assumed to be Tier 1; however, Transco would only accept credit for the NO_x reductions for upgrading the engine from Tier 3 to Tier 4.

Potential Train Emissions/Reductions: Replacement of EMD GP40PH-2A Model Locomotives with Bombardier ALP-45DP (w/Tier 4 Engine) Locomotives							
EPA Emission Standards: Train Engines ²	Pollutant	NO _x Emission Factor	HP	Annual Hours of Operation ¹	Single Locomotive Emissions	Number of Locomotives	Total Emissions for 17 Locomotives
Tier 3	NO _x	4.95	4,200	2,080	47.7	17	810.3
Tier 4 (2015 or later) ^{3,4}	NO _x	1.30	4,200	2,080	12.5	17	212.8
Total NO _x Emissions Savings for 17 Locomotives (TPY)							597.5

1. Annual Hours of Operation assumed to be 2,080 hours per year. 8 hours per day, 5 days per week, 52 weeks per year.
2. The existing NJ Transit locomotives are models GP40PH-2A and GP40PH-2B, last rebuilt between 1993 and 1997. The USEPA Tier 0-2 Standards adopted in December 1997/effective from 2000 apply to these locomotives. The applicability of the USEPA standards depend on the date the locomotive is originally manufactured or remanufactured. USEPA adopted a new set of regulations in 2008 which enacted more stringent Tier 0-2 emission standards for existing locomotives based on the remanufacture date, and additional Tier 3 and 4 emission standards.
3. Locomotives line-haul exhaust emission standards were used. Line-haul locomotives are defined by USEPA as powered by an engine with a maximum rate power greater than 2300 HP. Switch locomotives are powered by an engine with a maximum rate power of 2300 HP or less. USEPA Office of Transportation and Air Quality, *Locomotives: Exhaust Emission Standard*, EPA-420-B-16-24, March 2016.
4. The future ALP-45DP trains are dual mode, diesel and electric. For calculation purposes, the conservative case of the diesel NO_x emission factor was used. The NO_x emissions during electric mode would be 0.0 g/bhp-hr.

Example Emission Calculation for Bus Locomotive Engines

Equation 4

$$NO_x \text{ Emissions (tons)} = \frac{EF_{LE} * HP * \text{Total Work Hours}}{907,185 \frac{\text{gram}}{\text{ton}}}$$

EF_{LE} = Emission Factor based on EPA Line-Haul standards

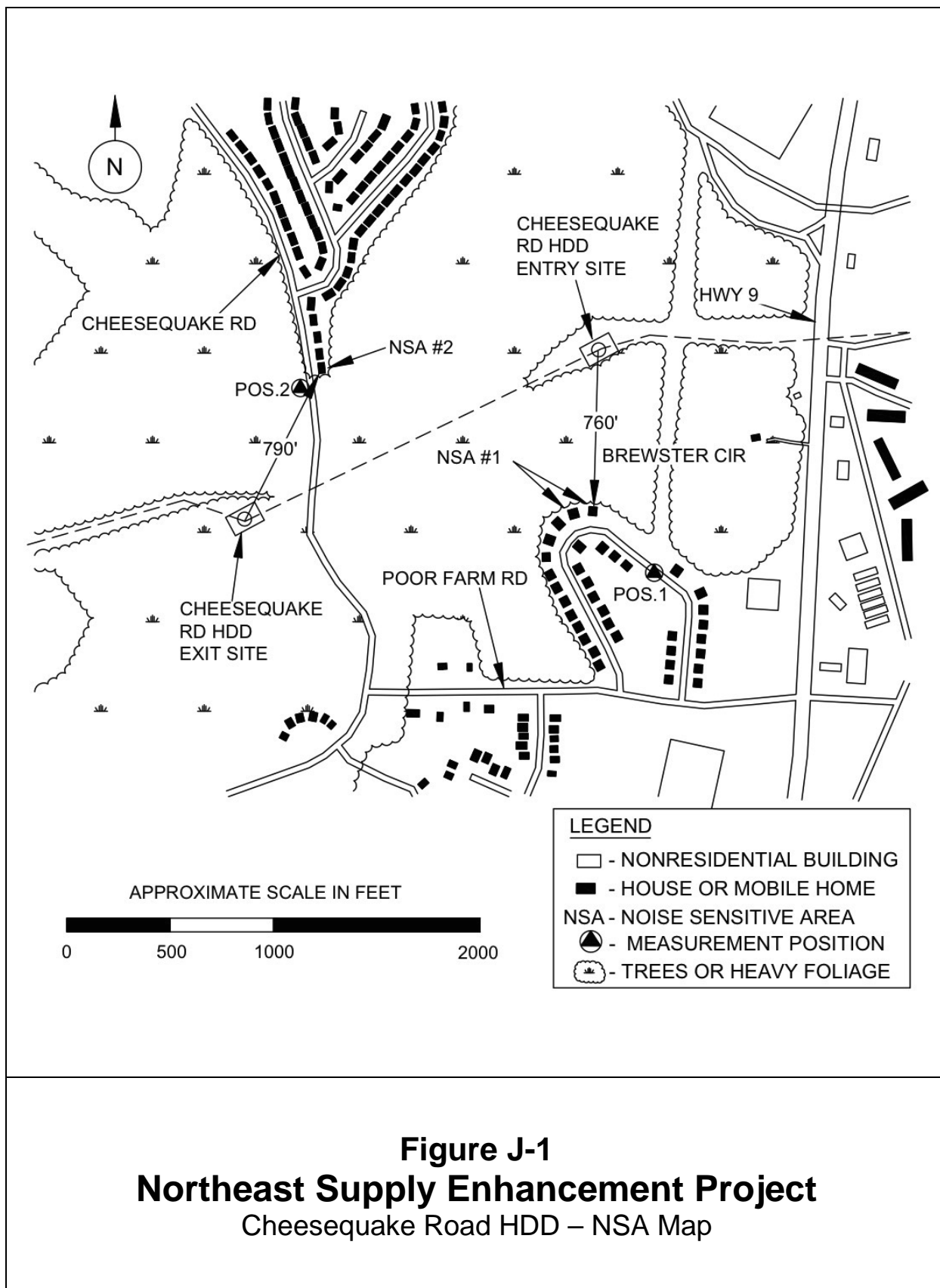
HP = horsepower

Total Work Hours = total estimated annual hours of operation.

The existing locomotive engines are assumed to be Tier 1; however, Transco is only accepting credit for the NO_x reductions for upgrading the engine from Tier 3 to Tier 4. Preliminary calculations assume an estimated power rating of 4,200 hp for existing and upgraded engines, and 2,080 annual hours of operation. The NO_x emissions offset was calculated as the annual difference of emissions (tons per year) between the existing and future locomotive engine emissions.

APPENDIX J

NOISE SENSITIVE AREA MAPS



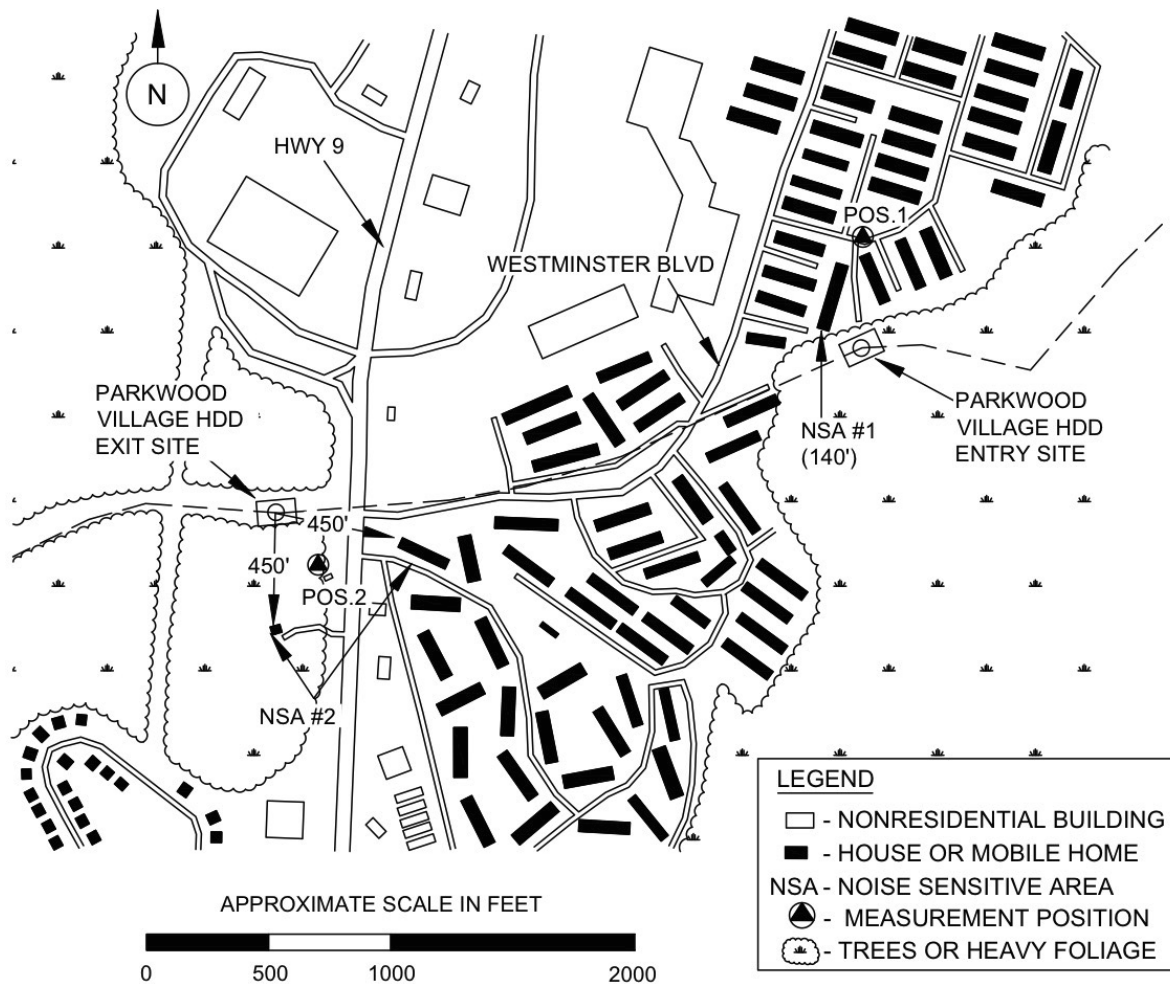
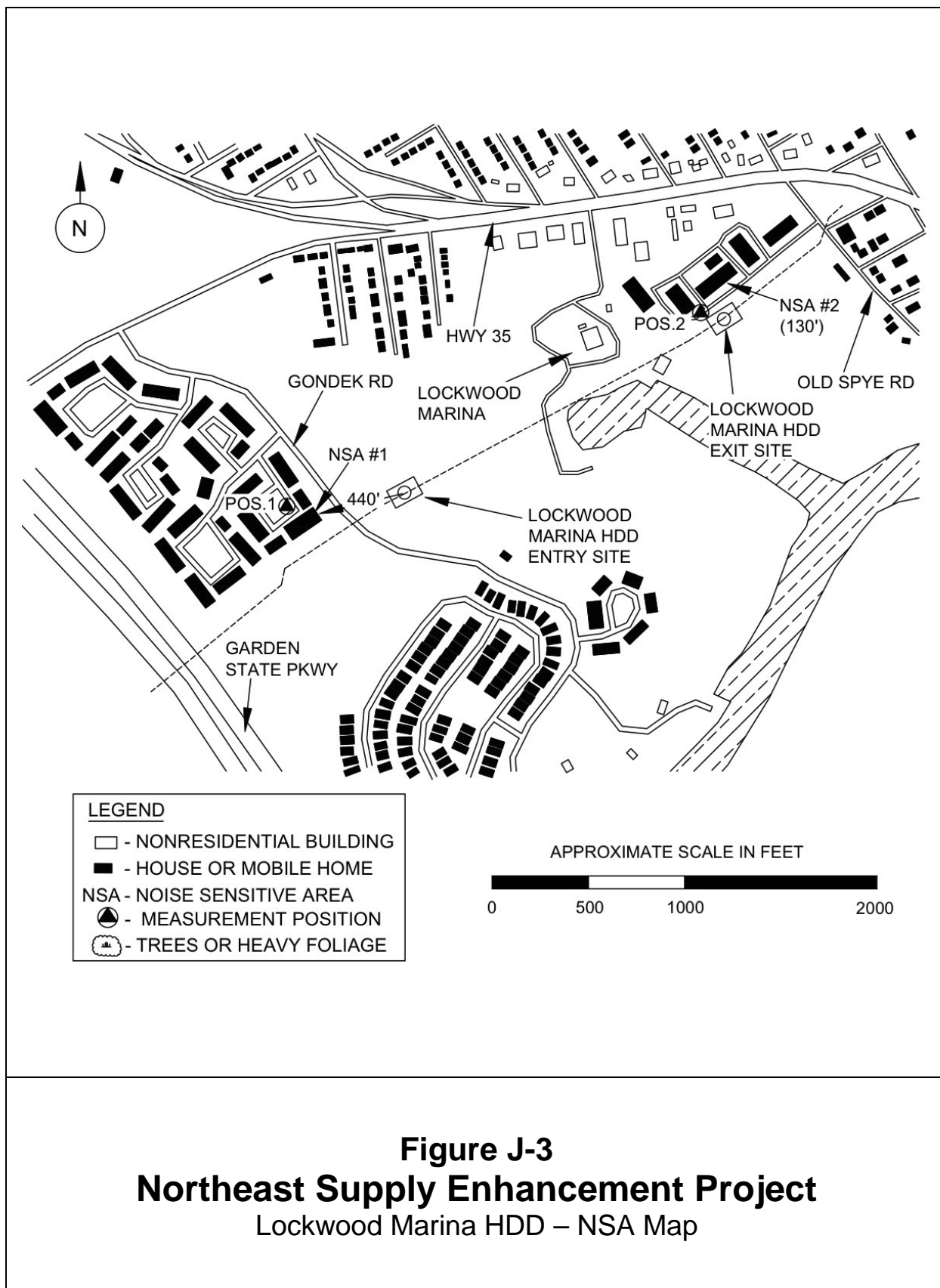


Figure J-2
Northeast Supply Enhancement Project
 Parkwood Village HDD – NSA Map



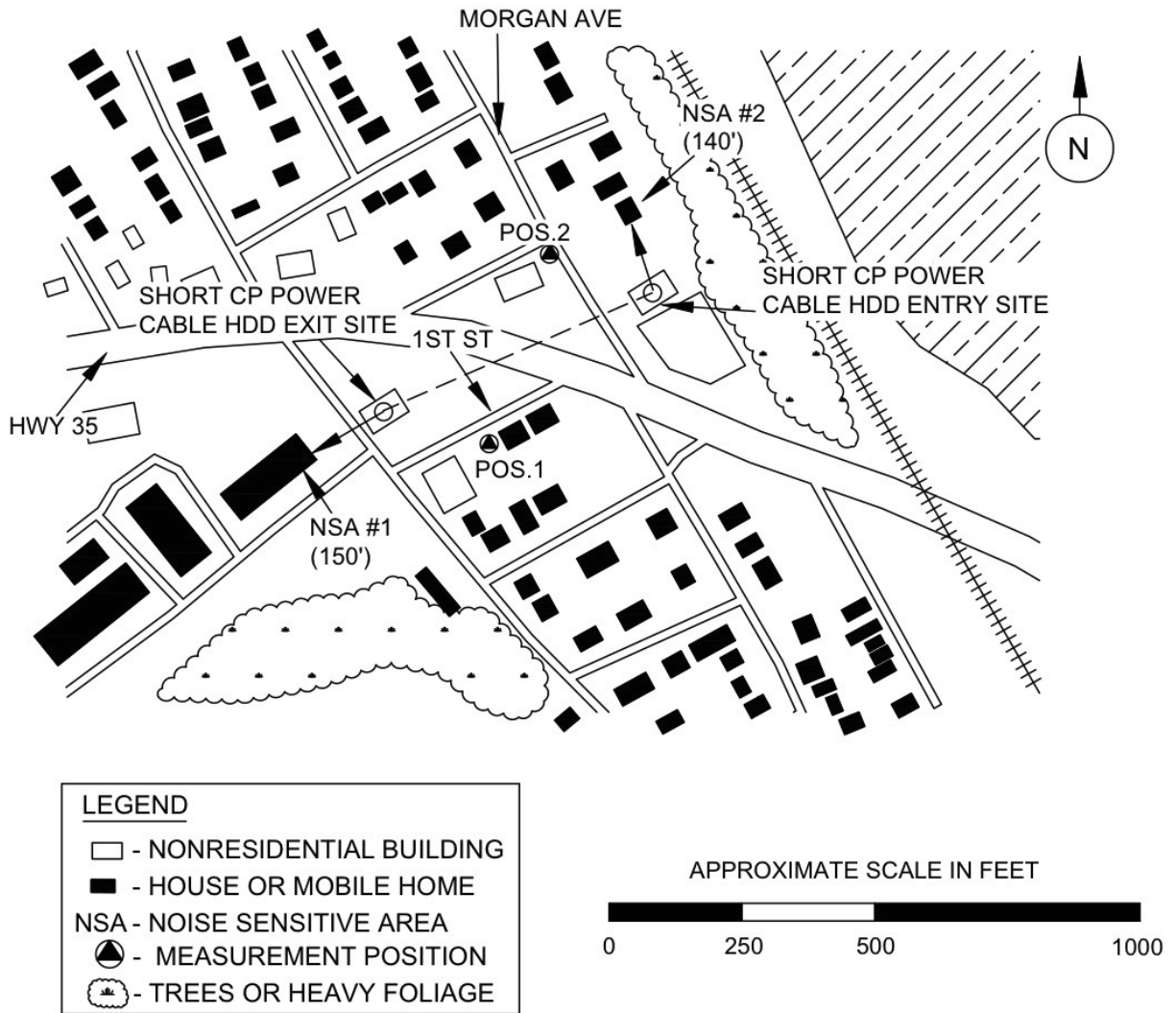


Figure J-4
Northeast Supply Enhancement Project
 Short CP Power Cable HDD – NSA Map

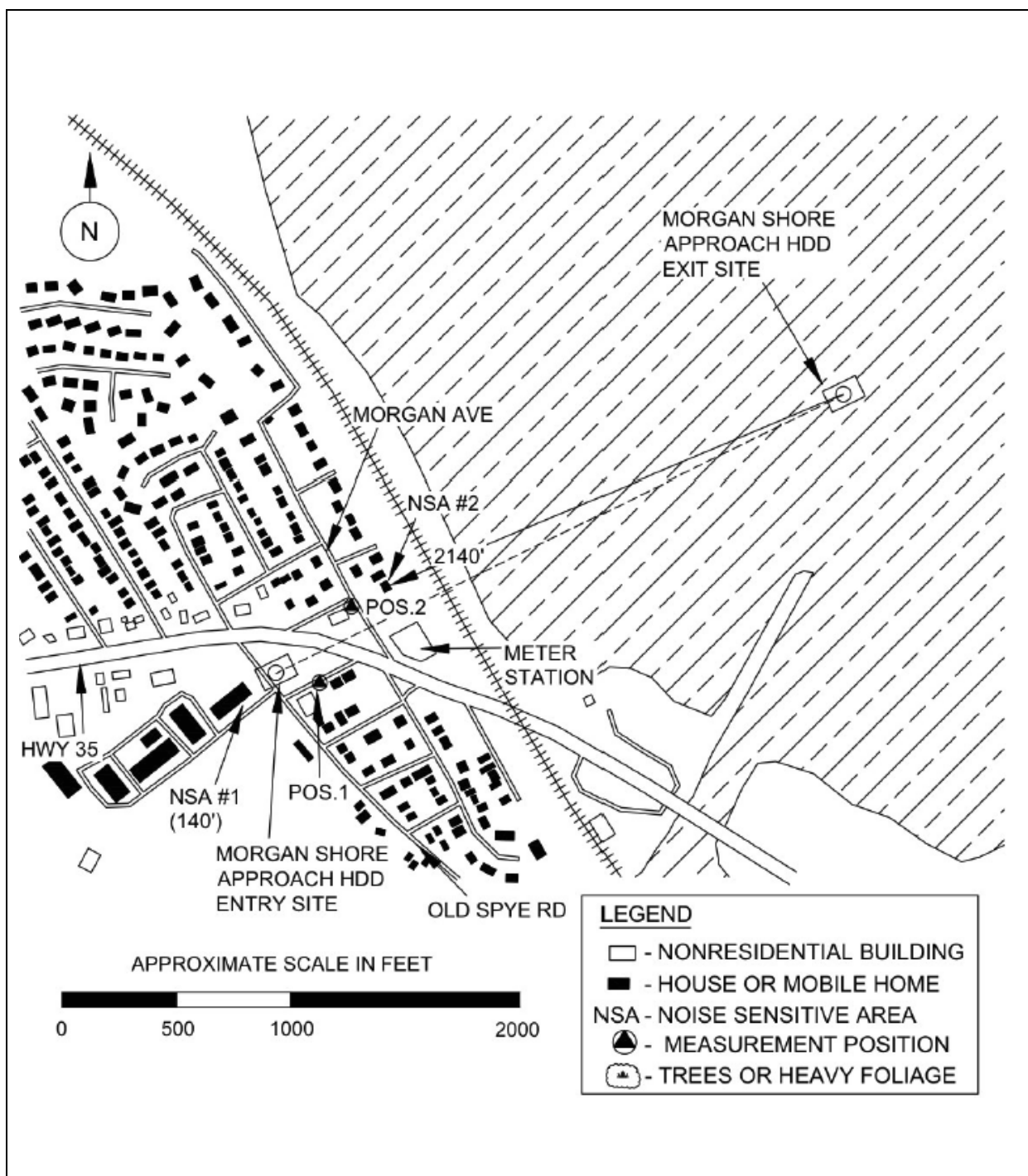


Figure J-5
Northeast Supply Enhancement Project
 Morgan Shore Approach HDD – NSA Map

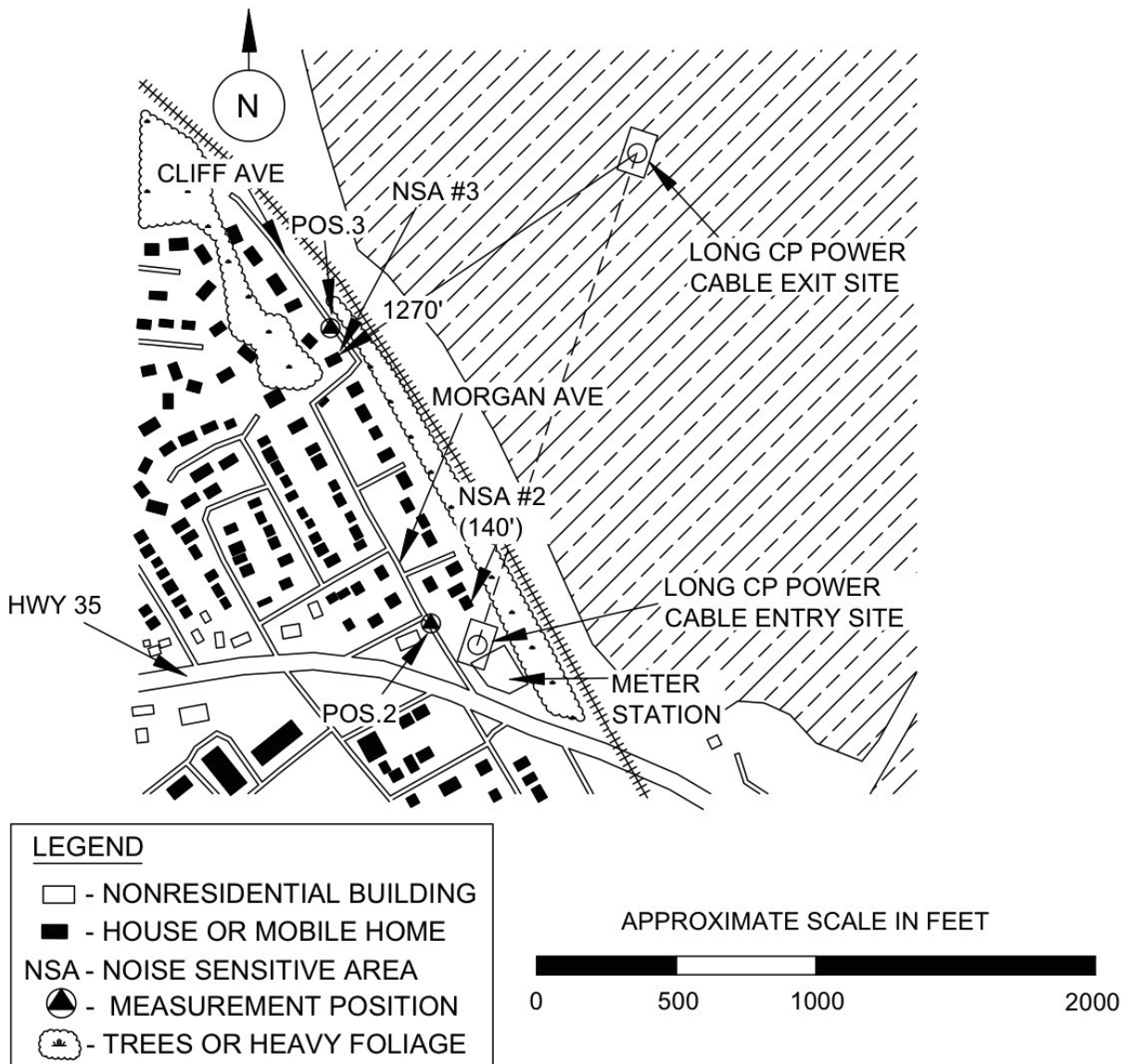


Figure J-6
Northeast Supply Enhancement Project
 Long CP Power Cable HDD – NSA Map

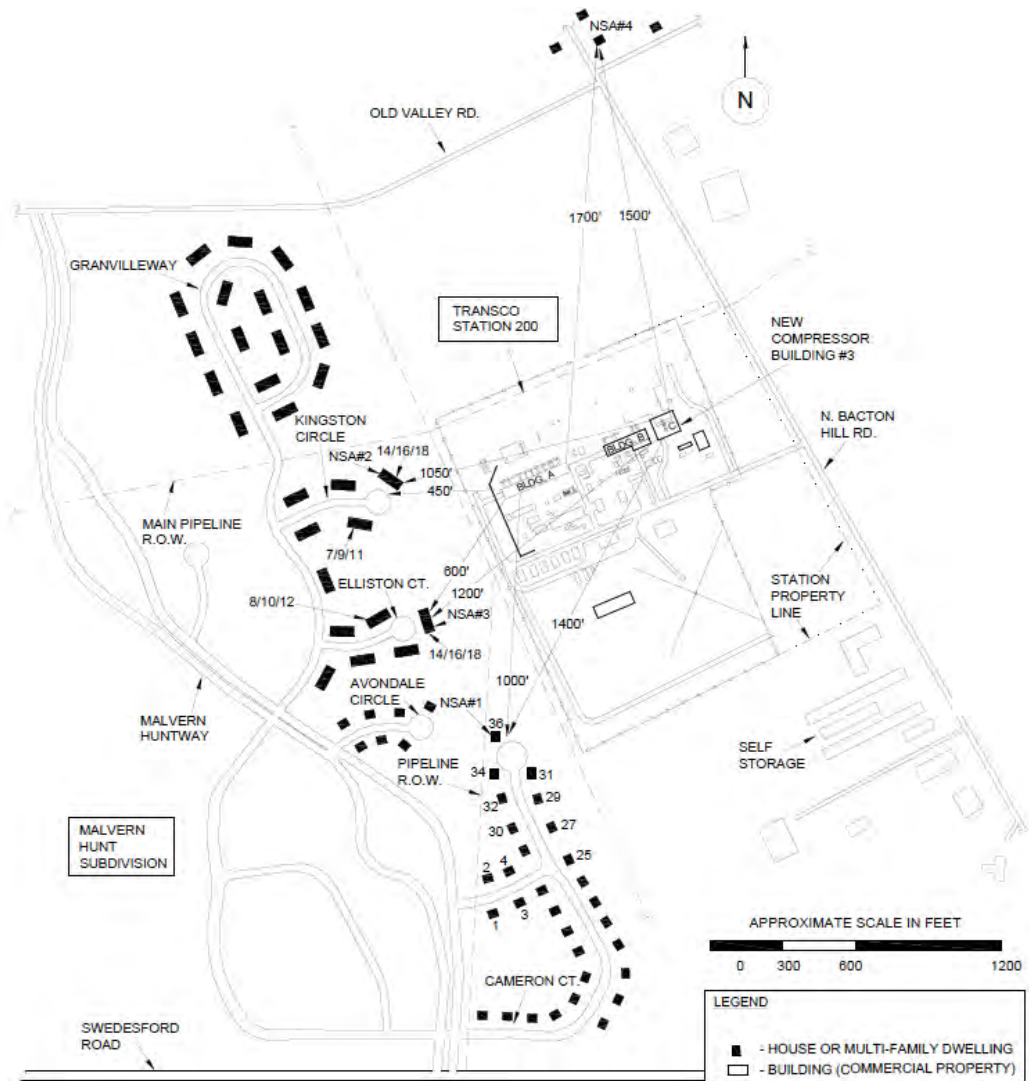


Figure J-7
Northeast Supply Enhancement Project
 Compressor Station 200 – NSA Map

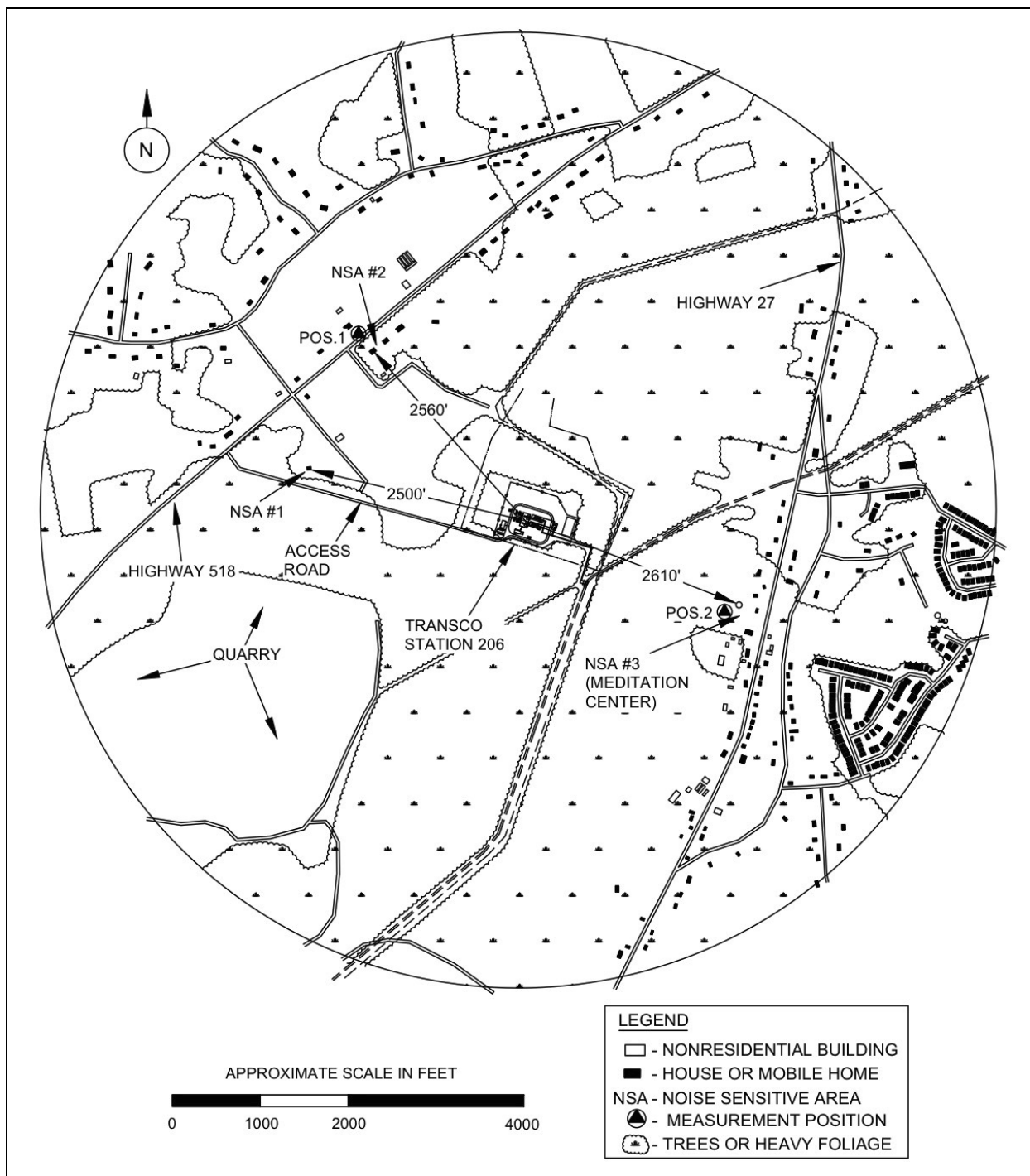


Figure J-8
Northeast Supply Enhancement Project
 Compressor Station 206 – NSA Map

APPENDIX K

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Appendix K

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APPENDIX L

LIST OF PREPARERS

Appendix L

List of Preparers

Federal Energy Regulatory Commission

Allen, Christine – Environmental Project Manager

B.S., Marine Biology, 2005, University of North Carolina, Wilmington

Wachholder, Joanne – Deputy Project Manager; Surface Water Resources; Wetlands

M.S., Crop and Soil Sciences/Environmental Toxicology, 1997, Michigan State University

B.S., Environmental Biology, 1994, University of Wisconsin, Stevens Point

Armbruster, Ellen – Cultural Resources

M.A., Anthropology, 1986, University of Pennsylvania

B.A., Anthropology, 1979, Bryn Mawr College

Augustino, Kylee – Air Quality and Noise; Reliability and Safety; General Conformity Determination

M.S., Environmental Engineering, Johns Hopkins University, 2016

B.A. & Sc., Biology and Geography, McGill University, 2005

Griffin, Robin – Land Use, Recreation, Special Interest Areas, and Visual Resources; Socioeconomics

M.S., Environmental Management, 1999, Illinois Institute of Technology

B.A., English Composition, 1992, DePauw University

Kragie, S. Xiah, P.E. – Air Quality and Noise; Reliability and Safety, General Conformity Determination

M.A., Geochemistry, 2013, Columbia University

M.P.H., Global Environmental Health, 2008, Emory University

B.S., Civil & Environmental Engineering, 2006, University of Maryland

Rana, Anthony – Geology; Groundwater

M.S., International Development, 2012, Tulane University Law School

Graduate Studies, Hydrogeology and Geochemistry, 1985–1988, Oklahoma State University

B.S., Geology, 1984, New Jersey City University

Suter, Magdalene – Air Quality; General Conformity Determination

B.S., Environmental Systems Engineering, 2004, Pennsylvania State University

U.S. Environmental Protection Agency

Knutson, Lingard (Region 2)

M.S., Environmental Science, C.W. Post University

Birkett, Dan (Region 2)

Blair, Aaron (Region 3)

B.S., Environmental Geology, Indiana University of Pennsylvania

U.S. Army Corps of Engineers

Strong, Patricia (Baltimore District)

B.S., Conservation and Environmental Resources, University of Maryland

Handell, Naomi (New York District)

City of New York

Brunner, Esther

Wei, Ke

Merjent, Inc.

Braun, Bill – Project Manager

M.S. course work, Geology, South Dakota School of Mines and Technology

B.A., Earth Science, St. Cloud State University, 1981

Dozier, Jessica – Deputy Project Manager; Air Quality and Noise; Reliability and Safety

M.S. Candidate, Energy Policy and Climate, Johns Hopkins University, 2015

B.S., Mechanical Engineering, Clark Atlanta University, 2006

Jessen, Kim – Deputy Project Manager; Land Use, Recreation, Special Interest Areas, and Visual Resources

B.A., Anthropology/Archaeology, Moorhead State University, 1994

Rice, Zeke – Deputy Project Manager (Final EIS); Offshore Alternatives; Issue Tracking; Quality Assurance/Quality Control

B.A., Anthropology/Archaeology and Sociology, Hamline University, 1992

DeName, Kristina – Onshore Surface Water Resources; Wetlands (Draft EIS)

B.S., Environmental and Forest Biology, SUNY-College of Environmental Science and Forestry, 2010

Durand, Angela – Onshore Vegetation, Wildlife, and Special Status Species

B.S., Natural Resources and Environmental Studies, University of Minnesota, 1999

Galer, Bruce – Geology; Groundwater (Draft EIS)

B.A., Geology, University of Minnesota, Morris, 1991

Hagebak-Davis, Monika – Land Use, Recreation, Special Interest Areas, and Visual Resources

B.A., Anthropology/Archaeology, University of Minnesota, 1996

Krause, Kari – Cultural Resources

M.S., Archaeological Resource Management, Ball State University, 1995

B.A., Anthropology/History, Ripon College, 1993

Mackenthun, Jeff – Offshore Surface Water Resources

B.S., Environmental Studies, Bemidji State University, 1997

Muehlhausen, John – Cumulative Impacts

B.A., Anthropology, University of Wisconsin at Madison, 1991

Mize, Kate – Soils

B.S., Environmental Science, Land Use Management and Soils Areas of Emphasis, University of Minnesota, 2004

Reich, Danielle (Shoal's Edge Consulting) – Offshore Aquatic Resources, Essential Fish Habitat, and Marine Special Status Species

M.S., Marine Fisheries, University of Rhode Island, Kingston, 2007

B.S., Biology and Society, Cornell University, 2004

Risse, William – GIS Support

M.A., Environmental Planning, University of Minnesota, Humphrey School of Public Affairs, 2014

B.S., Natural Resource Management – Land Use Planning, Minor Geographical Information Systems, University of Wisconsin – Stevens Point, 2012

Warner, Casey – Socioeconomics

Masters of Urban and Regional Planning, Virginia Tech 2005

B.A., Urban and Community Studies, University of Connecticut 2003

Merjent, Inc. is a third party contractor assisting the Commission staff in reviewing the environmental aspects of the project application and preparing the environmental documents required by NEPA. Third party contractors are selected by Commission staff and funded by project applicants. Per the procedures in 40 CFR 1506.5(c), third party contractors execute a disclosure statement specifying that they have no financial or other conflicting interest in the outcome of the project. Third party contractors are required to self-report any changes in financial situation and to refresh their disclosure statements annually. The Commission staff solely directs the scope, content, quality, and schedule of the contractor's work. The Commission staff independently evaluates the results of the third-party contractor's work and the Commission, through its staff, bears ultimate responsibility for full compliance with the requirements of NEPA.

APPENDIX M

COMMENTS ON THE DRAFT EIS AND DRAFT GENERAL CONFORMITY DETERMINATION AND RESPONSES

Northeast Supply Enhancement Project

Comments on the Draft EIS and Draft General Conformity Determination and Responses

INTRODUCTION

Approximately 1,765 parties submitted a total of 2,245 timely letters in response to the draft EIS. Multiple form letters and petitions were also submitted in response to the draft EIS. In addition, we held four public comment sessions during the draft EIS comment period, which provided interested parties with an opportunity to present verbal comments on our analysis of the environmental impacts of the Project as described in the draft EIS. A total of 232 people commented at the sessions.

A total of eight parties submitted comments in response to the draft General Conformity Determination. Additional letters were submitted comments during the comment period for the draft General Conformity Determination; however, these comments did not specifically address the draft General Conformity Determination and, therefore, are considered comments on the draft EIS and included in the totals above.

This appendix presents our responses to relevant comments provided on the draft EIS and draft General Conformity Determination. Letters are classified as follows:

- FA: Federal agencies and elected officials
- NAT: Native American Tribes
- SA: State/Commonwealth agencies and elected officials
- TA: Town/City agencies and elected officials
- LA: Local agencies (e.g., counties) and elected officials
- CO: Companies and Organizations
- IND: Individuals
- PM: Public Comment Sessions
- INT: Interveners

Table M-1 includes an index of comments on the draft EIS and draft General Conformity Determination, including the accession number, agency/organization/name of the commenter, and a comment code. Table M-2 provides our responses to the comment codes, which are defined as follows:

- GEN: General comments
- ALT: Alternatives
- GEO: Geology
- SOIL: Soils
- GW: Groundwater
- SURF: Surface Waters
- WET: Wetlands
- WILD: Wildlife
- AQU: Aquatic Resources
- T&E: Threatened, Endangered, and Other Special Status Species
- LU: Land Use, Recreation, Special Interest Areas, and Visual Resources
- SOCIO: Socioeconomics
- CULT: Cultural Resources
- AIR: Air Quality
- NOISE: Noise
- SAFE: Reliability and Safety
- CI: Cumulative Impacts
- GCD: Draft General Conformity Determination Comments

TABLE M-1

Index of Commenters on the Draft EIS and Draft General Conformity Determination

Letter Code	Commenter Name/Affiliation	Accession Number	Comment Code(s)
Federal Agencies and Elected Officials			
FA-1	The Honorable Cory A. Booker, U.S. Senate	20180326-0009	AIR-4
FA-2	U.S. Fish and Wildlife Service, New York Field Office (David A. Stilwell, Field Supervisor)	20180416-5057	T&E-5
FA-3	National Marine Fisheries Service, Greater Atlantic Regional Fisheries Office (Julia E. Crocker, Endangered Fish Recovery Branch Chief)	20180426-5183	T&E-9
FA-4	National Park Service, Gateway National Recreation Area (Douglas A. Adamo, Chief, Natural Resource Stewardship Director)	20180510-4001 (April 25 session)	AQU-1
FA-5	U.S. Fish and Wildlife Service, Pennsylvania Field Office (Robert M. Anderson, Acting Field Office Supervisor)	20180508-5031	T&E-2, T&E-11
FA-6	National Marine Fisheries Service (Louis A. Chiarella, Asst Regional Administrator)	20180514-4001	AQU-16, AIR-4
FA-7a	U.S. Department of the Interior (National Park Service)	20180514-6021	ALTS-7, T&E-15
FA-7b	U.S. Department of the Interior (U.S. Fish and Wildlife Service)	20180514-6021	T&E-4, T&E-6, AQU-6, T&E-16, T&E-3, GEN-51, T&E-7, WILD-10
FA-7c	U.S. Department of the Interior (U.S. Geological Survey)	20180514-6021	AQU-25
FA-8	The Honorable Frank Pallone, Jr., U.S. House of Representatives	20180516-0006	AQU-1, SOCIO-10, SAFE-10, GEN-1
FA-9	U.S. Environmental Protection Agency, Region 2 (Judy- Ann Mitchell, Chief)	20180518-0022	GEN-13, GEN-41, GEN-17, GW-6, SURF-4, WILD-11, LU-6, LU-5, AIR-12
FA-10	U.S. Environmental Protection Agency, Region 2 (Stephan A. Ryba, Chief)	20180531-4006, 20180604-0070	GEN-18
FA-11 ¹	The Honorable Bonnie Watson Coleman, U.S. House of Representatives	20180725-5222	SAFE-11, GW-2, NOISE-1, SAFE-15, ALTS-12
FA-12	U.S. Environmental Protection Agency, Region 2 (Grace Musumeci, Chief, Environmental Review Section)	20181023-4000, 20181030-0026	GCD-14, GCD-15, GCD-16

¹ This submittal also included comments on the Commission's *Notice of Inquiry*, issued April 19, 2018 under Docket No. PL18-1-000. The Commission will review all comments received in its consideration of any revisions to the Certificate Policy Statement.

TABLE M-1 (cont'd)

Index of Commenters on the Draft EIS and Draft General Conformity Determination			
Letter Code	Commenter Name/Affiliation	Accession Number	Comment Code(s)
Native American Tribes			
NAT-1	Stockbridge-Munsee Tribal Historic Preservation (Bonney Hartley)	20180511-5105	CULT-3
State Agencies and Elected Officials			
SA-1	New York State Department of Environmental Conservation (Thomas S. Berkman, Deputy Commissioner and General Counsel)	20180420-5191	WILD-9
SA-2	New Jersey Department of Environmental Protection, Division of Land Use Regulation (Christopher Jones, Manager)	20180501-5193	LU-19
SA-3	New York State Department of Environmental Conservation, Division of Environmental Permits (Karen M. Gaidasz, Project Manager, Major Projects Management Section)	20180514-6081	AIR-10, AQU-14, AQU-40, GEN-48, GEN-57, GEN-58, ALTS-11, ALTS-5, ALTS-9, ALTS-10, SURF-7, GEN-10, AQU-1, GEN-19, AQU-34, AQU-33, SOCIO-11, AQU-11, AQU-31, AQU-30, AQU-5, SURF-8, GEN-43, CI-11
SA-4	New Jersey Department of Environmental Protection, Office of Permit Coordination and Environmental Review (Ruth W. Foster, Acting Director)	20180515-5117	LU-18, T&E-12, T&E-13, GEN-48, AQU-31, AQU-30, AQU-22, ALTS-8, AQU-18, SOCIO-10, WILD-3, T&E-14, CULT-2, LU-8, GEN-53, SOIL-3, GEN-38, GEN-15, GEN-40, GEO-6, GEO-4, GW-8, GW-11, GW-9, GW-6, GW-10, CI-5, GEN-45, GEN-46, AIR-11, AIR-8
SA-5	Pennsylvania Department of Environmental Protection (Scott R. Williamson, Program Manager)	20180608-0008	GEN-52
SA-6	New Jersey Department of Environmental Protection, Office of Permit Coordination and Environmental Review (Ruth W. Foster, Acting Director)	20180719-5030, 20180731-0092	GEN-54, WILD-6, WILD-7, AQU-28, AQU-27, AQU-26, AQU-24
SA-7	New Jersey Department of Environmental Protection, Division of Land Use Regulation (Christopher Jones, Manager)	20180913-5017	GEN-54
SA-8	New Jersey Department of Environmental Protection, Division of Land Use Regulation (Christopher Jones, Manager)	20181011-5045	GEN-54
SA-9	New York State Department of Environmental Conservation, Division of Air Resources (Michael P. Sheehan, PE, Director, Bureau of Air Quality Permitting)	20181018-5130	GCD-8, GCD-9, GCD-10, GCD-11, GCD-12

TABLE M-1 (cont'd)

Index of Commenters on the Draft EIS and Draft General Conformity Determination

Letter Code	Commenter Name/Affiliation	Accession Number	Comment Code(s)
SA-10	New Jersey Department of Environmental Protection, Office of Permit Coordination and Environmental Review (Ruth W. Foster, Director)	20181107-5151, 20181203-0008	GCD-17, GCD-18, GCD-19, GCD-20, GCD-21, GCD-22, GCD-23, GCD-24, GCD-25, GCD-26, GCD-27, GCD-28, GCD-29, GCD-30, GCD-31, GCD-32, GCD-33, GCD-34, GCD-35, GCD-36, GCD-37, GCD-38, GCD-39, GCD-40, GCD-41, GCD-42, GCD-43, GCD-44, GCD-45, GCD-46, GCD-47, GCD-48, GCD-49, GCD-50
SA-11	New Jersey Department of Environmental Protection, Office of Permit Coordination and Environmental Review (Ruth W. Foster, Director)	20181107-5153	AQU-18, AQU-41

Local Agencies and Elected Officials

LA-1	The County of Chester (Brian N. O'Leary, AICP, Executive Director)	20180514-6140, 20180518-0019	LU-2, LU-3, NOISE-6, LU-17, GEN-48, LU-16, GEN-48, GEO-3, T&E-10, LU-9, LU-11, CI-1, SAFE-2, GEN-59, NOISE-7
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Town/City Agencies and Elected Officials

TA-1	Franklin Township (Robert G. Vornlocker, Jr., Township Manager)	20180410-5224; 20180418-0008	AIR-4, CI-7, AIR-5
TA-2	Franklin Township Board of Education (Mary L. Clark)	20180419-5021	GEN-7
TA-3	Franklin Township (Ann Marie McCarthy, Township Clerk)	20180425-5175	AIR-4, AIR-5
TA-4	Theodore Chase Jr.	20180503-5051	ALTS-17, GW-6, GEN-16
TA-5	Montgomery Township (Mark Conforti, Mayor)	20180508-5154	GEN-28, GEN-27, GEN-10, AIR-5, AIR-19, AIR-3, AIR-17, AIR-4, ALTS-12, ALTS-4, SOCIO-1
TA-6	South Brunswick Township (Barbara Nyitrai, Township Clerk)	20180510-5076, 20180510-5135	AIR-4, AIR-3
TA-7	Mayor and Council of Princeton (Delores A. Williams, Deputy Municipal Clerk)	20180510-5094	GEN-7
TA-8a	Township of South Brunswick (Accufacts, Inc.)	20180514-6074	GEN-31, SAFE-4, SAFE-9
TA-8b	Township of South Brunswick (Environmental Sciences and Energy Consulting)	20180514-6074	AIR-15, GEN-2, AIR-14
TA-8c	Township of South Brunswick (Princeton Hydro)	20180514-6074	GEN-11, ALTS-1, ALTS-16, GEN-10, ALTS-15, CI-6, WET- 5, WET-4, WET-6, SOIL-3, GW-5, GW-7, ALTS-6, AQU-8, AQU-12, AQU-7, AQU-9, AQU-21, SURF-8, AQU-2, AQU-4, AQU-1, AQU-36, AQU-23, AQU-32, AQU-29, GEN-48, AQU- 15, SOCIO-12, SOCIO-10, GEN-21, GEN-2

TABLE M-1 (cont'd)

Index of Commenters on the Draft EIS and Draft General Conformity Determination

Letter Code	Commenter Name/Affiliation	Accession Number	Comment Code(s)
TA-8d	Township of South Brunswick (The Goodman Group, Ltd.)	20180514-6074	SOCIO-5
TA-9	New York City Department of Transportation (Naim Rasheed, Senior Director)	20180518-5078, 20180524-0021	SOCIO-4
TA-10	Franklin Township, Department of Public Works (Carl Hauck, PE, CME, CPWM)	20180620-5059	GW-6
TA-11	Franklin Township Task Force on Compressor Station 206 and NESE	20180626-5068	GEN-10, SAFE-4, AIR-5, AIR-4, ALTS-12, SAFE-11, VEG-1, AQU-19, SOCIO-13, AQU-9, AQU-1, AQU-12, GEN-3, CI-9, GEN-27
TA-12	Township of South Brunswick (Mayor Charles Carley)	20180725-5104	GEN-56

Companies and Organizations

CO-1	Eastern Environmental Law Center (Aaron Kleinbaum, Esq.; Raghu Murthy, Esq.)	20180410-5035	GEN-10, ALTS-6, AQU-36, AQU-23, AQU-4, AQU-7, AIR-4, AIR-7, GEN-31, SOCIO-5
CO-2	Sierra Club, New Jersey Chapter (Gary Frederick, Chair)	20180410-5118	AIR-4
CO-3	Sierra Club, New Jersey Chapter (Gary Frederick, Chair)	20180420-5100	SAFE-11
CO-4	Building and Construction and Metal Trades Division; Pipefitters Local 274 (Michael J. Stiles, Business Manager)	20180425-5028, 20180510-4001 (April 25 session)	GEN-9
CO-5	LiUNA Local 158 (Robert Slick, President)	20180426-0014	GEN-9
CO-6	Wyoming County Landowners, LLC (Raymond "Bill" W. Wilson Jr., Coordinator)	20180426-0023	GEN-9
CO-7	350Brooklyn (Sara S. Gronim, Jackie Weisberg, Robert Jackson Wood); Food and Water Watch (Alison Grass)	20180427-0013	GEN-27, GEN-2, GEN-10, GEN-1, CI-9
CO-8	Sierra Club, New Jersey Chapter (Gary Frederick, Chair)	20180425-5000	GEN-10, GEN-3
CO-9	New Jersey Energy Coalition (Dr. Edward H. Salmon; Richard Jackson, Founder and Chairman; Executive Director)	20180430-5207	GEN-9
CO-10	NY/NJ Baykeeper (Sandra Meola)	20180510-4001 (April 25 session)	LU-4, SOCIO-12, GEN-10, AQU-1
CO-11	NY/NJ Baykeeper (Michele Langa)	20180510-4001 (April 25 session)	GEN-1, GEN-2, GEN-3, ALTS-4, GEN-10

TABLE M-1 (cont'd)

Index of Commenters on the Draft EIS and Draft General Conformity Determination			
Letter Code	Commenter Name/Affiliation	Accession Number	Comment Code(s)
CO-12	Food and Water Watch (Laura Shindell)	20180510-4002 (April 26 session)	CI-9, SAFE-6, AQU-9, SAFE-5, ALTS-4
CO-13	Eastern Environmental Law Center (Aaron Kleinbaum, Esq.; Raghu Murthy, Esq., Eastern E)	20180503-5139	GEN-34
CO-14	Clean Ocean Action, Inc. (Andrew J. Provence, Esq., Litwin & Provence, LLC)	20180504-5218	GEN-47
CO-15	Chester Water Authority (Daniel Barlow)	20180507-5065	SURF-3
CO-16	NY/NJ Baykeeper (Greg Remaud, Baykeeper and Executive Director)	20180508-5032	GEN-10, AQU-1, SAFE-12, SURF-6, AQU-32, AQU-38, AQU-23, AQU-9, AQU-29, T&E-1, SOCIO-10, SAFE-10, WET-1, ALTS-4
CO-17	New Jersey Buddhist Vihara and Meditation Center (Ven. Hungampola Siriratana, Chief Incumbant)	20180510-4003 (May 2 comment session)	GEN-1
CO-18	Sierra Club, New Jersey Chapter (Jeff Tittel, Director)	20180511-5135	GEN-10, CI-9, SAFE-10, GEN-2, AIR-5, AQU-1, SAFE-1
CO-19	Teamsters National Pipeline LMCT (Richard Stern, Administrator)	20180514-0013, 20181023-0025	GEN-9
CO-20	Sane Energy Project (Kim Fraczek, Director)	20180514-5546	GEN-47
CO-21	Surfrider Foundation (Nikita Scott (NY Chapter); Andrew Chambarry (Jersey Shore Chapter, Chair)	20180514-5552	CI-9, CI-10, GEN-6, SURF-9, AQU-9, LU-21, AQU-1, AQU-38, GEN-10, AQU-21, AQU-2, ALTS-6, AQU-31, AQU-40, AIR-2, GEN-2, GEN-31, SAFE-10, SAFE-17, SAFE-23, GEN-22, ALTS-4, ALTS-3, CI-1, LU-15, GEN-26, SOCIO-10
CO-22	Food and Water Watch (Junior Romero)	20180514-5568	GEN-3, AIR-3, CI-9
CO-23	Washington Crossing Audubon Society (C. Sharyn Magee, President)	20180514-5939	WILD-2, WILD-12, WILD-4
CO-24	National Grid Gas Delivery Companies	20180514-5995	GEN-9
CO-25	South Brunswick Environmental Commission (Dennis F. Weitz, Chairman)	20180514-6001	SAFE-11
CO-26	Institute for Policy Integrity at New York University School of Law, Natural Resources Defense Council, Union of Concerned Scientists	20180514-6016	CI-12
CO-27	Central Jersey Safe Energy Coalition (Kevin Corcoran)	20180514-6101	SAFE-11, SAFE-4, SAFE-16, GW-6, SAFE-15

TABLE M-1 (cont'd)

Index of Commenters on the Draft EIS and Draft General Conformity Determination

Letter Code	Commenter Name/Affiliation	Accession Number	Comment Code(s)
CO-28 ²	Eastern Environmental Law Center (Aaron Kleinbaum, Esq.; Raghu Murthy, Esq.)	20180514-6168	GEN-29, ALTS-2, ALTS-16, GW-7, ALTS-1, ALTS-6, GEN-10, AIR-15, AIR-9, AIR-3, AIR-14, SAFE-4, GEN-31, SAFE-8, ALTS-13, GEN-2, SOCIO-5, SOCIO-10, CI-12, GEN-47
CO-29	New York City Housing Authority (Serina Lezama, et al.)	20180515-5031, 20180515-5034	GEN-9
CO-30	New Jersey League of Conservation Voters (Edward Potosnak, Executive Director)	20180515-5118	GEN-29, SAFE-4, GEN-10
CO-31	Clean Ocean Action (Cindy Zipf, Executive Director)	20180515-5121	GEN-50, GEN-2, GEN-28, ALTS-4, ALTS-2, CI-9, SURF-5, GEN-10, GEN-3, AQU-2, AQU-21, AQU-13, AQU-34, AQU-10, AQU-1, AQU-1
CO-32	NY/NJ Baykeeper (Greg Remaud, Baykeeper and Executive Director)	20180515-5124	GEN-10, AQU-1, SAFE-12, AQU-2, SURF-6, AQU-32, AQU-38, AQU-23, AQU-9, AQU-29, T&E-1, T&E-8, SOCIO-10, WET-2, SOCIO-12, SAFE-10, SAFE-15, AIR-5, SAFE-4, GEN-2, CI-9, ALTS-1
CO-33	Watershed Institute (Michael L. Pisauo, Jr.)	20180515-5137	GEN-10, SURF-2, VEG-1, GW-7, WET-3
CO-34	Democratic Socialists of America - New York City Climate Justice Working Group	20180514-5557, 20180514-5706	GEN-43, CI-9, CI-12
CO-35	Northeast Supply Enhancement (Megan Stafford, Williams, Public Outreach)	20180515-0008 (included approximately 850 names)	GEN-9
CO-36	Pipeliners Local 798 (Danny Hendrix, Business Manager)	20180515-0009 (included approximately 2,050 names)	GEN-9
CO-37	Pennsylvania Power Plant Services Group, LLC (David S. Reilly, President/Chief Executive Officer)	20180516-0008	GEN-9
CO-38	Regional Plan Association (Thomas K. Wright, President and CEO)	20180525-5086	GEN-9
CO-39	Associated Petroleum Industries of Pennsylvania (Stephanie Catarino Wissman, Executive Director)	20180510-4004	GEN-9
CO-40	Eastern Environmental Law Center (Aaron Kleinbaum, Esq.; Raghu Murthy, Esq.)	20180614-5163	GEN-55

² Comment letter CO-28 included the same attachments as comment letter TA-8. The comments associated with those attachments are coded under comment letters TA-8b, TA-8c, and TA-8d.

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Letter Code	Commenter Name/Affiliation	Accession Number	Comment Code(s)
CO-41	Vision Long Island (Eric Alexander, Director)	20180807-5067	GEN-9
CO-42	BFC Partners (Donald Capoccia)	20180822-0017	GEN-9
CO-43	National Supermarket Association (Nelson Eusebio, Director of Government Relations)	20180828-0013	GEN-9
CO-44	Millstone Valley Preservation Coalition, Inc. (Brad Fay, MVP Coalition Board President)	20180925-5047	GEN-1, SAFE-4, CULT-4, AIR-5, SAFE-17, SAFE-1
CO-45	Eastern Environmental Law Center (Aaron Kleinbaum, Esq.)	20181018-5105	GCD-4, GCD-5, GCD-6, GCD-7
CO-46	Long Island Contractors' Association (Marc Herbst, Executive Director)	20181025-0011	GEN-9
CO-47	South Brunswick Environmental Commission (Dennis F. Weitz, Chairman)	20181016-5072	SAFE-11
CO-48	Long Island Association (Kevin S. Law, President and Chief Executive Officer)	20181126-0009	GEN-9
CO-49	Caithness Energy, L.L.C. (Ross D. Ain, Executive Vice President)	20181206-5297	GEN-9
CO-50	The Business Council (Heather C. Briccetti, Esq., Director of Government Affairs)	20181212-5268	GEN-9

Individuals

IND-1	Kelley Armstrong	20180322-0027	GEN-9
IND-2	Karl Kimmich	20180322-0028	GEN-9
IND-3	Michael Butler	20180322-0029	GEN-9
IND-4	Bill Kelley Sr.	20180322-0030	GEN-9
IND-5	Dennis Sworden	20180329-5002	NOISE-5, AIR-13
IND-6	John Aiello	20180330-5020; 20180402-5288	GEN-5
IND-7	Nathaniel Shields	20180330-5288	GEN-2, AIR-5, GEN-8
IND-8	Leila Ullman	20180330-5296	GEN-5
IND-9	Camilla Correa	20180330-5297	GEN-5
IND-10	Alyssa Lau	20180402-5003	GEN-5
IND-11	Johnathan H. Lu	20180402-5004	GEN-5
IND-12	Claire L. Adair	20180402-5005	GEN-5
IND-13	George B. Millett	20180402-5007	GEN-27, SAFE-20, GEO-2

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IND-14	Clare Martin	20180402-5185	GEN-5
IND-15	Leopoldo Solis	20180402-5363	GEN-5
IND-16	John Signorelli	20180403-0009	CI-3, GEN-37
IND-17	Ethan M. Katz	20180403-5002	GEN-5
IND-18	Srindhi Ramakrishna	20180403-5004	GEN-5
IND-19	Diana Vazquez Romo	20180403-5005	GEN-5
IND-20	Alya Ahmad	20180403-5006	GEN-5
IND-21	Eli J. Berman	20180403-5007	GEN-5
IND-22	Kenji Cataldo	20180403-5008	GEN-5
IND-23	Peter C. Schmidt	20180403-5009	GEN-5
IND-24	Karen Gallagher-Teske	20180403-5028	GEN-5
IND-25	Kirk Frost	20180403-5063	GEN-27, AIR-1, GEN-8
IND-26	Samuel C. Venturella	20180403-5165	GEN-5
IND-27	Jill Shah	20180403-5173	GEN-5
IND-28	Emily Reinhold	20180403-5184	GEN-5
IND-29	Remi C. Shaul-Thompson	20180404-5000	GEN-5
IND-30	Kirit Limperis	20180404-5001	GEN-5
IND-31	Noah Mihan	20180404-5003	GEN-5
IND-32	Zachariah A. Kish-DeGiulio	20180404-5005	GEN-5
IND-33	Jisu Jeong	20180404-5006	GEN-5
IND-34	Connie Miao	20180404-5007	GEN-5
IND-35	William Simon	20180404-5009	GEN-5
IND-36	Rafi Lehmann	20180404-5010	GEN-5
IND-37	Nicolas Ng	20180404-5011	GEN-5
IND-38	Ricki Hecklen	20180404-5012	GEN-5
IND-39	Rebecca Sobel	20180404-5014	GEN-5
IND-40	Matthew Rosen	20180404-5015	GEN-5
IND-41	William Conte	20180404-5016	GEN-5
IND-42	Joshua Weissmann	20180404-5017	GEN-5
IND-43	Kirk Frost	20180404-5038	AIR-4
IND-44	Sara Anjum	20180404-5054	GEN-5

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IND-45	Risa Gelles-Watnick	20180404-5100	GEN-5
IND-46	Camille Liotine	20180404-5117	GEN-5
IND-47	Emily Ho	20180404-5209	GEN-5
IND-48	Edward Power	20180405-5001	AQU-9, AQU-1
IND-49	Arjun S. Krishnan	20180405-5002	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-50	Nathan C. Leach	20180405-5003	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-51	Andrew Kaneb	20180405-5004	GEN-5, GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-52	Audrey Hahn	20180405-5005	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-53	Barrett Gray	20180405-5006	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-54	Aisha Tahir	20180405-5007	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-55	Kavya Chaturvedi	20180405-5008	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-56	Ben J. Bollinger	20180405-5009	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-57	Priscilla Lee	20180405-5010	AIR-5
IND-58	Lily A. Rezai	20180405-5011	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-59	Morgan Nicolao	20180405-5012	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-60	Malka A. Himelhoch	20180405-5013	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-61	Naomi Cohen-Shields	20180405-5014	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-62	Nathan Finkle	20180405-5015	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-63	Chelsie Alexandre	20180405-5187	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-64	Jack Aiello	20180405-5188	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-65	Natalie Stein	20180405-5189	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-66	Anna Marsh	20180406-5000	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-67	Carla Dias	20180406-5001	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-68	Wilbur Wang	20180406-5002	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-69	Christina Moon	20180406-5003	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-70	Fumika Mizuno	20180406-5004	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-71	Jackson Vail	20180406-5005	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-72	Joice Kim	20180406-5006	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-73	Vinod Gupt	20180406-5008	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-74	Madison Spinelli	20180406-5039	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-75	Sasha L. Culley	20180406-5054	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4

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IND-76	Vanna Haniff	20180409-5002	GEN-2, SOCIO-6, GEN-3, CI-9
IND-77	Patrick Diamond	20180409-5005	GEN-3, SOCIO-10
IND-78	Todd M. Gureckis	20180409-5020	AQU-9, GEN-2, GEN-27
IND-79	Sara Gronim	20180409-5053	GEN-27, CI-9, SOCIO-6
IND-80	Matthew A. Kritz	20180409-5252	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-81	Isabel O'Connell	20180410-5158	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-82	Melanie Febinger	20180411-5028	AIR-4
IND-83	Rebecca Raffa	20180411-5109	GEN-3, ALTS-4
IND-84	Steven Smith	20180413-5114	AIR-3, LU-4, SOCIO-1, SAFE-18, GEN-30
IND-85	William Roberson	20180416-5003	GEN-1, CI-9, ALTS-4, GEN-2
IND-86	Darren Klein	20180416-5005	WILD-5
IND-87	Iwona Kapcia	20180416-5006	GEN-3, ALTS-4
IND-88	Meredith Craig DePietro	20180416-5007	SAFE-10
IND-89	Elizabeth Moran	20180416-5008	SAFE-10
IND-90	Laurel Tumarkin	20180416-5009	SAFE-10
IND-91	Scheherazade	20180416-5010	SAFE-10
IND-92	Gregory Dutcher	20180416-5076	GEN-1
IND-93	Claire Chandler	20180416-5190	GEN-1, SAFE-10
IND-94	Jane Willis	20180417-5000	SAFE-10
IND-95	Eric Wilson	20180417-5003	SAFE-10
IND-96	Robert Wood	20180417-5005	SAFE-10
IND-97	Sebastian LR Benzecry	20180417-5006	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-98	Allison Huang	20180417-5007	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-99	Katie Kubala	20180417-5008	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-100	Sam Bartusek	20180417-5009	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-101	Francisca Weirich-Freiberg	20180417-5010	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-102	Thomas Ross	20180417-5011	SAFE-10
IND-103	Elizabeth Watts	20180417-5013	SAFE-10
IND-104	Riley Heath	20180417-5014	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-105	Kathryn Stromme	20180417-5015	SAFE-10
IND-106	Rosemarie Santiesteban	20180417-5016	SAFE-10

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IND-107	Guy Jacob	20180417-5057	SAFE-10
IND-108	Sarah Lipuma	20180417-5065	CI-12
IND-109	Andre Wiesmayr	20180417-5076	GEN-3
IND-110	Christina Pennoyer	20180417-5082	CI-9
IND-111	Stephanie (no last name provided)	20180417-5103	CI-9
IND-112	Jackie Weisberg	20180417-5154	CI-9
IND-113	Raphael Wakefield	20180417-5191	CI-9, ALTS-4
IND-114	Stuart Pomeroy	20180418-5000	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-115	Lisa Harrison	20180418-5001	SAFE-10
IND-116	Stephan Polcyn	20180418-5002	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-117	Gregory Dutcher	20180418-5003	CI-9
IND-118	Narek Galstyan	20180418-5004	AIR-3
IND-119	Robert Wood	20180418-5005	CI-9
IND-120	Atakan Baltaci	20180418-5008	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-121	Isabelle Kuziel	20180418-5009	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-122	Elizabeth Watts	20180418-5010	CI-9
IND-123	Thomas Ross	20180418-5011	CI-9, GEN-43
IND-124	Christine Simko	20180418-5045	AIR-3
IND-125	Jackie Weisberg	20180418-5066	AIR-3
IND-126	Sara Gronim	20180418-5115	SAFE-10
IND-127	Sally Jones	20180418-5118	AIR-2
IND-128	Laura Cisar	20180418-5119	GEO-2
IND-129	Bernice Gordon	20180419-5000	CI-9
IND-130	Elizabeth Watts	20180419-5001	CI-9, GEN-1
IND-131	Nancy LaCorte	20180419-5002	AIR-4
IND-132	Nancy LaCorte	20180419-5003	AIR-18
IND-133	Stephanie Zepka	20180419-5004	SAFE-11
IND-134	Stephanie Zepka	20180419-5005	SAFE-4
IND-135	Naomi Nierenberg	20180419-5006	AIR-4
IND-136	Vanna Haniff	20180419-5007	GEN-20, ALTS-4
IND-137	Robert Scardapane	20180419-5008	GEN-30

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IND-138	Tamar Kieval Brill	20180419-5009	GEN-10, WILD-12
IND-139	Junior Romero	20180419-5010	GEN-3, AQU-32
IND-140	Robert Scardapane	20180419-5011	AIR-5
IND-141	Robert Scardapane	20180419-5012	AIR-4
IND-142	Thomas A. Steinberg	20180419-5018	WILD-12
IND-143	Robert Scardapane	20180419-5014	SAFE-11
IND-144	Robert Scardapane	20180419-5015	SAFE-11
IND-145	Tamar Kieval Brill	20180419-5016	GEN-30
IND-146	Robert Scardapane	20180419-5017	SAFE-4
IND-147	Robert Scardapane	20180419-5013	WILD-12, AIR-4
IND-148	Robert Scardapane	20180419-5019	GW-5
IND-149	Robert Scardapane	20180419-5020	AQU-37
IND-150	Robert Scardapane	20180419-5022	GEN-27
IND-151	Larry Klein	20180419-5023	AIR-4
IND-152	Tamar Kieval Brill	20180419-5024	AIR-5
IND-153	Tamar Kieval Brill	20180419-5025	AIR-4
IND-154	Numeriano O. Tan	20180419-5026	AIR-5
IND-155	Shubhendu Singh	20180419-5027	AIR-5
IND-156	Janaksinh Jadeja	20180419-5028	AIR-18
IND-157	Jane McCarty	20180419-5029	SAFE-4
IND-158	Shubhendu Singh	20180419-5030	AIR-4
IND-159	Regina Maher	20180419-5031	AIR-4
IND-160	Regina Maher	20180419-5032	WILD-12
IND-161	Shubhendu Singh	20180419-5033	WILD-12
IND-162	Paul Mattia	20180419-5034	GEN-10, WILD-12
IND-163	Regina Maher	20180419-5035	SAFE-11
IND-164	Regina Maher	20180419-5036	GW-5
IND-165	Janaksinh Jadeja	20180419-5037	SAFE-11
IND-166	Regina Maher	20180419-5038	AQU-37
IND-167	Regina Maher	20180419-5039	GEN-27
IND-168	Andrew Boyd	20180419-5040	CI-9

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IND-169	Kathryn Riss	20180419-5041	SAFE-6, SAFE-10, GEN-10
IND-170	Laura Transue	20180419-5042	GW-5
IND-171	Laura G. Kogan	20180419-5043	GEN-1
IND-172	Laura Transue	20180419-5044	AQU-37
IND-173	Joseph Ort	20180419-5045	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-174	Daniel Lima	20180419-5047	SAFE-6, SAFE-10, GEN-10
IND-175	Judith F. Malin	20180419-5048	AIR-18, WILD-12
IND-176	Clare Nolan	20180419-5049	CI-9
IND-177	William Christopher	20180419-5050	SAFE-10
IND-178	Darren Klein	20180419-5051	AIR-3
IND-179	Mary Martin	20180419-5052	AQU-9
IND-180	Larry Klein	20180419-5057	GW-6
IND-181	Carla Zambelli Mudry	20180419-5119	SAFE-1, GW-1, GEN-2, GEN-27
IND-182	Guy Jacob	20180419-5126	CI-9
IND-183	Guy Jacob	20180419-5134	CI-9
IND-184	Catherine Nieves	20180419-5155	GEN-3, GEN-20, SAFE-20, AQU-39, CI-2
IND-185	Nina Riddel	20180419-5163	SAFE-1, ALTS-4
IND-186	Caroline Golum	20180419-5174	SOCIO-10
IND-187	Rachel Goodgal	20180419-5195	SOCIO-12
IND-188	Heidi A. Wendel	20180419-5229	GEN-6, GEN-2, ALTS-4, SOCIO-6, GEN-3, SAFE-10
IND-189	Sara Gronim	20180419-5252	CI-9
IND-190	Larry Klein	20180419-5256	AIR-5
IND-191	Guy Jacob	20180419-5280	GEN-3, SOCIO-12
IND-192	Mary Ellen Sullivan	20180420-5001	SOCIO-12, SAFE-20, ALTS-4
IND-193	Thea R. Zalabak	20180420-5002	GEN-5
IND-194	Vanna Haniff	20180420-5003	GEN-20
IND-195	Michael G. Bell	20180420-5004	SAFE-1, AIR-3, SAFE-4
IND-196	Elizabeth Watts	20180420-5005	SOCIO-12
IND-197	Bernice Gordon	20180420-5006	SOCIO-10
IND-198	Bernice Gordon	20180420-5007	SAFE-10
IND-199	Teresa (no last name)	20180420-5008	GW-2, GW-6

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IND-200	Carol Kelly	20180420-5031	GEN-2
IND-201	Larry Klein	20180420-5070	AIR-5
IND-202	Larry Klein	20180420-5079	SAFE-4, SAFE-11
IND-203	Jackie Weisberg	20180420-5080	SOCIO-12
IND-204	Claire Chandler	20180420-5097	AQU-9
IND-205	S. Pasricha	20180420-5117	AIR-3, ALTS-4
IND-206	Elizabeth Peterson	20180420-5118	SAFE-1
IND-207	Lisa Harrison	20180423-5000	SOCIO-12
IND-208	Diane Doolittle	20180423-5001	GEN-1, AQU-1, LU-13, LU-12, AIR-3, ALTS-4
IND-209	John Muth	20180423-5002	GEN-30, GEN-10
IND-210	Michael Wyllie	20180423-5004	CI-2
IND-211	Marni Fylling	20180423-5005	GEN-1, AQU-9, SAFE-1
IND-212	Walker Everette	20180423-5006	SOCIO-12
IND-213	John Muth	20180423-5007	GEN-10
IND-214	Sally Jones	20180423-5008	AQU-1
IND-215	Robert Wood	20180423-5009	AQU-9, SOCIO-10
IND-216	Robert Wood	20180423-5010	GEN-2
IND-217	Anne Kiley	20180423-5011	GEN-3, AIR-3, CI-9
IND-218	Paula Speer	20180423-5012	GEN-2, GEN-6, CI-9, AIR-3, AQU-9, SAFE-10, GEN-25, ALTS-4
IND-219	John Ingram	20180423-5013	CI-9
IND-220	Nydia Leaf	20180423-5014	AQU-1
IND-221	Eileen Leonard	20180423-5015	CI-9
IND-222	Vanna Haniff	20180423-5016	GEN-2
IND-223	Vanna Haniff	20180423-5017	GEN-20
IND-224	Vanna Haniff	20180423-5018	ALTS-4, GEN-20
IND-225	John D. Muth	20180423-5019	AIR-5
IND-226	Jackie Weisberg	20180423-5020	GEN-2
IND-227	Phyllis Beals	20180423-5021	AQU-9
IND-228	Robert M. Beals	20180423-5022	SOCIO-1, GEN-2
IND-229	Robert M. Beals	20180423-5023	GEN-3

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IND-230	Phyllis Beals	20180423-5024	SOCIO-12, SAFE-18
IND-231	Elizabeth Watts	20180423-5025	AQU-9
IND-232	Elizabeth Watts	20180423-5027	GEN-2
IND-233	Laura Cisar	20180423-5028	GEO-5
IND-234	Brigitte Kinniburgh	20180423-5046	SAFE-10
IND-235	Rachel Goodgal	20180423-5074	AQU-1, AQU-23
IND-236	Marian Ronan, Ph.D.	20180423-5126	GEN-2
IND-237	Chris Toth	20180423-5202	SAFE-1
IND-238	Mary C. McKinney	20180424-5000	AQU-9
IND-239	John Muth	20180424-5001	AIR-5
IND-240	Heela Capell	20180424-5002	CI-9
IND-241	Jesse Capell	20180424-5003	CI-9
IND-242	Vanna Haniff	20180424-5004	AQU-1
IND-243	Harvey Turer	20180424-5005	AQU-9
IND-244	Kirk Frost	20180424-5006	GEN-35
IND-245	Sebastian Quiroz	20180425-5006	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-246	Shafaq Khan	20180425-5007	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-247	Theodore R. Trevisan	20180425-5008	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
IND-248	John Coviello and Family	20180424-5112	GEN-3, GEN-2
IND-249	Marian (no last name)	20180424-5154	SAFE-10
IND-250	Vanna Haniff	20180425-0011	ALTS-4
IND-251	Suresh Channraju	20180430-5012	GEN-1
IND-252	Pat Gallaudet	20180425-5001	GEN-1
IND-253	Melanie J. La Rosa	20180425-5002	CI-9, ALTS-4
IND-254	Elizabeth Watts	20180425-5003	AQU-23
IND-255	Elizabeth Watts	20180425-5004	GEN-10
IND-256	John Muth	20180425-5005	AIR-4
IND-257	Alan Bentz-Letts	20180425-5009	SAFE-1, AQU-1, CI-9
IND-258	Shanna Estevez	20180425-5010	SAFE-10, SAFE-17, GEN-10, WILD-5
IND-259	Christina Pennoyer	20180425-5046	GEN-10
IND-260	Karen Ingram	20180425-5081	GEN-10

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IND-261	Liz Forest	20180425-5095	AQU-9
IND-262	Teresa Silletti	20180425-5104	GEN-1
IND-263	Karen Ingram	20180425-5105	AQU-23
IND-264	Mary Ellen Maddalena	20180425-5151	NOISE-4, SURF-1, AIR-1, CULT-4, LU-13, ALTS-14, SAFE-15
IND-265	Richard Niederberger	20180426-0015	GEN-9
IND-266	Phillip McCann	20180426-0016	GEN-9
IND-267	Anthony Sasso	20180426-0017	GEN-9
IND-268	Peter Butler	20180426-0018	GEN-9
IND-269	Steve Grimes	20180426-0019	GEN-9
IND-270	Brooke Taylor	20180426-0020	GEN-9
IND-271	Durand Carson	20180426-0022	GEN-9
IND-272	James Leonzio	20180426-5000	SAFE-10
IND-273	Diana Pittet	20180426-5001	GEN-3, AIR-3, SOCIO-10, CI-9
IND-274	James Leonzio	20180426-5003	CI-9
IND-275	James Leonzio	20180426-5004	CI-9, GEN-2
IND-276	James Leonzio	20180426-5005	GEN-2
IND-277	James Leonzio	20180426-5006	AQU-9
IND-278	John Muth	20180426-5007	AIR-18
IND-279	James Leonzio	20180426-5008	AQU-1
IND-280	James Leonzio	20180426-5009	SOCIO-12
IND-281	Galacia Outes	20180426-5010	AQU-1
IND-282	Lisa Harrison	20180426-5011	GEN-2
IND-283	Lisa Harrison	20180426-5012	AQU-9
IND-284	Lisa Harrison	20180426-5013	AQU-1, GEN-10, AQU-9, GEN-10
IND-285	Vanna Haniff	20180426-5014	GEN-10
IND-286	Taylor Sinkiewicz	20180426-5015	GEN-3
IND-287	Rick Horan	20180426-5076	GEN-9
IND-288	Sharon Stoneback	20180426-5119	GEN-10
IND-289	Carol Kuehn	20180426-5122	SOCIO-12
IND-290	Maria Simanca	20180426-5143	GEN-3, SOCIO-10, AQU-9

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IND-291	Kate Walker	20180426-5152	GEN-2, ALTS-4, CI-9, AQU-1, SURF-5
IND-292	Lisa Stanton	20180426-5159	GEN-1
IND-293	Damien J. Greene-Ayala	20180426-5167	GEN-3, SAFE-10
IND-294	Siddika Pasi	20180426-5215	GEN-1, ALTS-4
IND-295	Adriana Estrada	20180426-5220	AQU-1
IND-296	Daniel Halperin	20180427-5006	GEN-10
IND-297	Joseph Stark	20180427-5007	GEN-2, AQU-9, AQU-23, SAFE-10
IND-298	John Muth	20180427-5008	WILD-12
IND-299	Carol Kuehn	20180427-5060	AQU-9, GEN-10
IND-300	Florence Carnahan	20180427-5063	GEN-1
IND-301	Angela P. McGlynn	20180427-5190	GEN-1
IND-302	Carol Kuehn	20180427-5255	AQU-1, GEN-10
IND-303	Carol Kuehn	20180430-5000	AQU-23, LU-12
IND-304	Guy Jacob	20180430-5003	GEN-10
IND-305	John Muth	20180430-5004	WILD-12, GEN-27
IND-306	Carol Kuehn	20180430-5006	GEN-10
IND-307	John Muth	20180430-5007	SAFE-11
IND-308	Jay (no last name)	20180430-5008	GEN-1, SAFE-1, NOISE-4
IND-309	Angela Nelson	20180430-5009	GEN-1
IND-310	Ninad Patel	20180430-5010	GEN-1
IND-311	Denis A. Gooding	20180430-5011	GEN-1
IND-312	Jason A. Sneider	20180426-0021	GEN-9
IND-313	Elena Didita	20180430-5013	GEN-1
IND-314	John Muth	20180430-5014	SAFE-11
IND-315	Amit Kumar	20180430-5015, 20180430-5016	GEN-49
IND-316	Larry Klein	20180430-5017	SAFE-4
IND-317	Carol P. Kuehn	20180430-5018	CI-12, GEN-2, GEN-10
IND-318	Carol P. Kuehn	20180430-5019	CI-9
IND-319	Carol P. Kuehn	20180430-5020	SAFE-10
IND-320	John Muth	20180430-5021	SAFE-4

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IND-321	Jill Lauri	20180430-5048	GEN-3, CI-9
IND-322	Yogita Prakaas	20180430-5075	GEN-1
IND-323	Murthy Upmaka	20180430-5076	GEN-1
IND-324	Amy Pickering	20180430-5079	SAFE-10
IND-325	Gaurang Patel	20180430-5087	AIR-3, SAFE-1
IND-326	Edwin Carman	20180430-5251	AIR-3, GEN-2, SAFE-1
IND-327	Phoebe Warren	20180430-5338	GEN-5
IND-328	John Signorelli	20180501-0009	SAFE-13, GEN-37
IND-329	Carol P. Kuehn	20180501-5000	NOISE-2, GEN-21, NOISE-4
IND-330	Ruixiu Wang	20180501-5001	GEN-1
IND-331	John Muth	20180501-5002	SAFE-6, SAFE-10, GEN-10
IND-332	Laura Cisar	20180501-5003	GEO-3
IND-333	Elizabeth A. Roedell	20180501-5004, 20180517-0026	GEN-10, AQU-23
IND-334	Meredith DeMarco	20180501-5017	AQU-1, AQU-31, GEN-10, AQU-9, AQU-29, AQU-23
IND-335	Meredith Comi	20180501-5071	AQU-1, AQU-31, GEN-10, AQU-9, AQU-29, AQU-23
IND-336	Philippa Solomon	20180510-4001 (April 25 session)	GEN-1, SOCIO-12, VEG-1, LU-20, ALTS-4
IND-337	Judith D. McCrone	20180510-4001 (April 25 session)	GEN-1, SAFE-1, SOCIO-1, ALTS-4, CI-9, AQU-9, LU-4
IND-338	Samantha Kreisler	20180510-4001 (April 25 session)	SAFE-11, LU-4, SAFE-1, AIR-3, AQU-23, AQU-9, AQU-1, GEN-10
IND-339	Lynne Weiss	20180510-4001 (April 25 session)	GEN-10, LU-4, SAFE-11, GW-6, SAFE-16, SAFE-10, AQU-9
IND-340	Denise Morgan	20180510-4001 (April 25 session)	AIR-3, AQU-9, GEN-27, SAFE-1, ALTS-4
IND-341	Barbara Chaudhery	20180510-4001 (April 25 session)	SOCIO-12, AQU-9, GEN-10
IND-342	Linda Powell	20180510-4001 (April 25 session)	GEN-10, SAFE-10, LU-4, LU-12, GW-3
IND-343	Carol Gilmore	20180510-4001 (April 25 session)	LU-4, SOCIO-10, AQU-1, SOCIO-7, CI-9, SAFE-1, SOCIO-1

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IND-344	Francis Corio	20180510-4001 (April 25 session)	GEN-9
IND-345	Neil Springvloed (Local 825)	20180510-4001 (April 25 session)	GEN-9
IND-346	Ellen Faden	20180510-4001 (April 25 session)	GEN-1, ALTS-4
IND-347	Brian Lee [baykeeper printout]	20180510-4001 (April 25 session)	SOCIO-12, SOCIO-10
IND-348	Brian Lee [handwritten]	20180510-4001 (April 25 session)	LU-4, AQU-31
IND-349	Mark O'Connor	20180510-4001 (April 25 session)	GEN-3, SAFE-1, GEN-1
IND-350	Tina Kelly	20180510-4001 (April 25 session)	GEN-9
IND-351	Thomas O'Donnell (Local 825)	20180510-4001 (April 25 session)	GEN-9
IND-352	Brian Lee ["Impacts" printout]	20180510-4001 (April 25 session)	GEN-10
IND-353	Daniel Ortega (Local 825)	20180510-4001 (April 25 session)	GEN-9
IND-354	Vera DePalma	20180510-4002 (April 26 session)	CI-9, CI-9
IND-355	Patrick Houston	20180510-4002 (April 26 session)	GEN-10, AQU-9, GEN-1
IND-356	Brigitte Kinniburgh	20180510-4002 (April 26 session)	CI-9, SAFE-10
IND-357	Christian Svanes Kolding	20180510-4002 (April 26 session)	AQU-9, AQU-1, GEN-1
IND-358	Richard Porta	20180510-4002 (April 26 session)	AQU-9, SAFE-1, GEN-26, AIR-5, GEN-2, ALTS-4, GEN-1
IND-359	James Hannigan	20180510-4002 (April 26 session)	GEN-26
IND-360	David Turner	20180510-4002 (April 26 session)	ALTS-4

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IND-361	Thomas Gilligan	20180510-4002 (April 26 session)	AQU-2, GEN-1, ALTS-4
IND-362	Barbara Hertel	20180510-4002 (April 26 session)	SAFE-10, AQU-9, GEN-2, GEN-26
IND-363	Richard Faraino	20180510-4002 (April 26 session)	SAFE-1, AQU-9, GEN-6, GEN-2, GEN-26
IND-364	Carol Kuehn	20180510-4002 (April 26 session)	GEN-10, CI-12, GEN-2, CI-9, SAFE-10, GW-6
IND-365	Maryellen Power	20180510-4002 (April 26 session)	AQU-9, AQU-23, AQU-1, SAFE-10, GEN-2, CI-9, GEN-26
IND-366	Jacalyn Dinhofer	20180510-4002 (April 26 session)	GEN-1, ALTS-4
IND-367	Japheth Baker	20180510-4002 (April 26 session)	GEN-1
IND-368	Jill Lauri	20180510-4002 (April 26 session)	GEN-1, SAFE-10, GEN-2, AQU-1
IND-369	Dylan Garcia	20180510-4002 (April 26 session)	CI-9, SOCIO-12, AQU-9
IND-370	William Christopher	20180510-4002 (April 26 session)	CI-9, GEN-43, GEN-26
IND-371	Martin Locante	20180510-4002 (April 26 session)	GEN-1, GEN-2
IND-372	[No name given]	20180510-4002 (April 26 session)	GEN-1
IND-373	Spyridon Gouras	20180510-4002 (April 26 session)	GEN-1, GEN-2, SAFE-1, AQU-9
IND-374	Lucia McCreery	20180510-4002 (April 26 session)	GEN-2, AQU-9, CI-9, SAFE-10, GEN-1
IND-375	Lyel Resner	20180510-4002 (April 26 session)	GEN-26, SAFE-10, GEN-10
IND-376	Robert Micallef	20180510-4002 (April 26 session)	GEN-9
IND-377	Ignazio Nobile	20180510-4002 (April 26 session)	GEN-9

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IND-378	Vincent Albanese	20180510-4002 (April 26 session)	GEN-9
IND-379	Thomas Wendol	20180510-4002 (April 26 session)	CI-9
IND-380	Bemshi Shearer-Jones	20180510-4002 (April 26 session)	ALTS-4, AQU-9, SAFE-10, AQU-19
IND-381	Catherine Skopic	20180510-4002 (April 26 session)	CI-9, ALTS-4, GEN-1, CI-9
IND-382	Elizabeth DiCesare	20180510-4002 (April 26 session)	GEN-2
IND-383	Kevin Corcoran	20180510-4002 (April 26 session)	AQU-9, LU-4, LU-1, GEN-1, GEN-3, CI-3
IND-384	John Muth	20180502-5001	GW-5
IND-385	Dr. Donna Lisi	20180502-5050	AIR-5
IND-386	Kirk Frost	20180502-5055	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-387	Sean Gargamelli-McCreight	20180502-5072	GEN-6, ALTS-4, CI-9, GEN-2
IND-388	Carol P. Kuehn	20180502-5103	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-389	Sara Gronim	20180502-5107	CI-9
IND-390	Sara Gronim	20180502-5111	GEN-2
IND-391	Valsan Vellalath	20180502-5142	AIR-4, AIR-5
IND-392	John Muth	20180503-5002	GW-5
IND-393	Christine Edwards	20180503-5023	GEN-6, ALTS-4
IND-394	Ed Tyre	20180504-5181	GEN-9
IND-395	Barbara Cuthbert	20180503-5080	GEN-10
IND-396	Christine Lu	20180504-5000	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-397	Hannah T. Tandy	20180504-5001	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-398	Daniel Stanley	20180504-5002	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-399	Joshua J. Maccoby	20180504-5003	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12

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IND-400	Lucy Lin	20180504-5004	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-401	Mimi Chung	20180504-5005	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-402	Jacob Berman	20180504-5006	SAFE-4
IND-403	Jasmine M. Lu	20180504-5007	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-404	Anhar Karim	20180504-5008	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-405	Isaac Wolfe	20180504-5009	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-406	John Muth	20180504-5010	LU-4, GEN-10, AQU-37, LU-12
IND-407	Beverly Shen	20180504-5011	GEN-5
IND-408	Victoria Talvola	20180504-5012	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-409	Jason Kim	20180504-5013	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-410	Maressa K. Cumbermack	20180504-5014	GEN-5
IND-411	Dennis Duffin	20180504-5015	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-412	Soyeong Park	20180504-5016	GEN-5
IND-413	Vienna Lunking	20180504-5017	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-414	Alexandra Levinger	20180504-5018	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-415	Melita Piercy	20180504-5019	GEN-5
IND-416	Malika Oak	20180504-5020	GEN-10
IND-417	Emily McDonnell	20180504-5021	GEN-5
IND-418	Tajreen Ahmed	20180504-5022	GEN-5
IND-419	Rebecca Blevins	20180504-5023	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-420	William Sweeny	20180504-5024	GEN-5
IND-421	Ysabel Ayala	20180504-5025	GEN-5

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IND-422	Lydia M. Watt	20180504-5026	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-423	Kayla E. Memis	20180504-5027	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-424	Olivia Kusio	20180504-5028	GEN-5
IND-425	Michaela S. Daniel	20180504-5029	GEN-5
IND-426	David B. FitzPatrick	20180504-5030	GEN-5
IND-427	Maya Eashwaran	20180504-5031, 20180504-5032	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-428	Ellen Pristach	20180504-5090	GEN-3, CI-9, AQU-9, SAFE-1
IND-429	Ellen Pristach	20180504-5093	GEN-5
IND-430	Gabriela Figueredo	20180501-0037	GEN-56
IND-431	Nicole Wines	20180501-0037	GEN-56
IND-432	Norma Vargas	20180501-0037	GEN-56
IND-433	Sajan Padikunju	20180501-0037	GEN-56
IND-434	Maric Marshall	20180501-0037	GEN-56
IND-435	Annette Ritchie	20180501-0037	GEN-56
IND-436	Katii Lumbadi	20180501-0037	GEN-56
IND-437	Anyi Sanchez	20180501-0037	GEN-56
IND-438	Susan Meaney	20180501-0037	GEN-56
IND-439	Sophia McDermott-Huges	20180501-0037	GEN-56
IND-440	Yang Jiao	20180501-0037	GEN-56
IND-441	J. Riegnes	20180501-0037	GEN-56
IND-442	Sophie Kuzma	20180501-0037	GEN-56
IND-443	Laura Kalmak	20180501-0037	GEN-56
IND-444	Jill Levey	20180501-0037	GEN-56
IND-445	Laurent Reyes	20180501-0037	GEN-56
IND-446	Diana Cruz	20180501-0037	GEN-56
IND-447	Craig Boidelson	20180501-0037	GEN-56
IND-448	Steven Kelb	20180501-0037	GEN-56
IND-449	Orly Levitan	20180501-0037	GEN-56

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IND-450	Tamar Barkey	20180501-0037	GEN-56
IND-451	Meredith Carman	20180501-0037	GEN-56
IND-452	Melanie McDermott	20180501-0037	GEN-56
IND-453	Lance Greene	20180501-0037	GEN-56
IND-454	Heather Brady	20180501-0037	GEN-56
IND-455	Michael Lando	20180501-0037	GEN-56
IND-456	Steve Osman	20180501-0037	GEN-56
IND-457	Stephanie Morris	20180501-0037	GEN-56
IND-458	Malcolm Greenberg	20180501-0037	GEN-56
IND-459	Cecille DeLaurentis	20180501-0037	GEN-56
IND-460	Tina Weishaus	20180501-0037	GEN-56
IND-461	E Leiter	20180501-0037	GEN-56
IND-462	Ora Gourarie	20180501-0037	GEN-56
IND-463	Mary Klimik	20180501-0037	GEN-56
IND-464	Steve Uron	20180501-0037	GEN-56
IND-465	Benjamin Diaz	20180501-0037	GEN-56
IND-466	Diana Heinlich	20180501-0037	GEN-56
IND-467	Steven Kadinsky	20180501-0037	GEN-56
IND-468	Neil Patel	20180501-0037	GEN-56
IND-469	Chip Donnelly	20180501-0037	GEN-56
IND-470	Isabel Ruano	20180501-0037	GEN-56
IND-471	M Klee	20180501-0037	GEN-56
IND-472	Denise Nickel	20180501-0037	GEN-56
IND-473	Jaimi Williams	20180501-0037	GEN-56
IND-474	Roslla Sabatini	20180501-0037	GEN-56
IND-475	Shujie Lin	20180501-0037	GEN-56
IND-476	Janna Kepley	20180501-0037	GEN-56
IND-477	Anthony Ayola	20180501-0037	GEN-56
IND-478	Linda Brown	20180501-0037	GEN-56
IND-479	Rachael Speer	20180501-0037	GEN-56
IND-480	Robert Brucker	20180801-0051	GEN-56

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IND-482	S Pasricha	20180801-0051	GEN-56
IND-483	Jamie Zaccaria	20180801-0051	GEN-56
IND-484	Samatha Kreisler	20180801-0051	GEN-56
IND-485	Kevin Corcoran	20180801-0051	GEN-56
IND-486	Bernadette Maher	20180801-0051	GEN-56
IND-487	Diane Ali	20180801-0051	GEN-56
IND-488	Barbara Brucker	20180801-0051	GEN-56
IND-489	Ellen Faden	20180801-0051	GEN-56
IND-490	Subhashis Banerjee	20180801-0051	GEN-56
IND-491	Linda Powell	20180801-0051	GEN-56
IND-492	Junior Romero	20180801-0051	GEN-56
IND-493	Jessica Jones	20180801-0051	GEN-56
IND-494	Brian Lee	20180501-0052	GEN-56
IND-495	Vonon Gupla	20180501-0052	GEN-56
IND-496	Cheray Wright	20180501-0052	GEN-56
IND-497	Michaela Powell	20180501-0052	GEN-56
IND-498	Thomas Laconich	20180501-0052	GEN-56
IND-499	Francisco Gomez	20180501-0052	GEN-56
IND-500	Gary Frederick	20180501-0052	GEN-56
IND-501	Danielle Kelly	20180501-0053	GEN-56
IND-502	Jamal Jenkins	20180501-0053	GEN-56
IND-503	Steve Wright	20180501-0054	GEN-56
IND-504	Roselyn Bell	20180501-0055	GEN-56
IND-505	Nikhita C. Salgame	20180504-5195	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-506	John Muth	20180507-5002	AQU-37
IND-507	Andrew Wu	20180507-5004	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
IND-508	Elizabeth A. Roedell	20180507-5006, 20180514-0012	GEN-10, WILD-2

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IND-509	John Muth	20180507-5007	GEN-27
IND-510	Michelle Cashen	20180507-5009	GEN-2, SAFE-10, AQU-9, CI-9
IND-511	John Muth	20180507-5013	GEN-27
IND-512	Vinod Gupta	20180507-5014	GEN-1, SAFE-15, GEN-10
IND-513	Rekha Gupta	20180507-5015	AIR-4, AIR-5, AIR-3, GEN-10
IND-514	Madhava Shenoy	20180507-5016	GEN-1, SURF-1, GW-2
IND-515	Linda Glaeberman	20180507-5018	AIR-3, SAFE-11, SAFE-16, GW-6, AIR-4
IND-516	James A. Colquist	20180507-5037	AIR-3, GEN-10, AIR-5, AIR-18, AIR-4
IND-517	Lori G. Colquist	20180507-5039	GW-5, LU-4, GEN-3
IND-518	Catherine M. Colquist	20180507-5042	SAFE-4, SAFE-16, GW-6, AIR-3, SAFE-11
IND-519	Joan W. Scott	20180507-5046	GEN-1
IND-520	Laura Cisar	20180507-5052	SOIL-1, SOIL-2
IND-521	Maren Perry	20180507-5058	SAFE-1, SAFE-4, SAFE-6, LU-7, GW-6, GEN-3, AIR-3
IND-522	Bradley Kerr	20180507-5071	AQU-9
IND-523	Sara Gronim	20180507-5077	AQU-9
IND-524	Edith Kantrowitz	20180507-5081	SAFE-10
IND-525	Edith Kantrowitz	20180507-5082	GEN-3
IND-526	Ellen Pristach	20180507-5188	SAFE-4, SAFE-16, GW-6, AIR-3, SAFE-11
IND-527	Ellen Pristach	20180507-5189	CI-12, GEN-2, GEN-10
IND-528	Joanne Boger	20180508-0012	GEN-2
IND-529	Joanne Boger	20180508-0013	AQU-2, GEN-10
IND-530	Joanne Boger	20180508-0014	AQU-9
IND-531	Joanne Boger	20180508-0015	SAFE-10
IND-532	Christa Renee Fordham	20180508-5002	GEN-1
IND-533	Hazel A. Williams	20180508-5003	GW-2, GEN-2
IND-534	John Muth	20180508-5004	AQU-12, AQU-9, AQU-37, GEN-10, AQU-9, LU-4
IND-535	Vinod Gupta	20180508-5005	GEN-1
IND-536	Carl Carlson	20180508-5018	GEN-10, GEN-3
IND-537	Drew E. Cuthbert	20180508-5102	SAFE-11
IND-538	Drew E. Cuthbert	20180508-5103	SAFE-6, SAFE-10, GEN-10, SAFE-4
IND-539	Drew E. Cuthbert	20180508-5104	WILD-12, GEN-10

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IND-540	Barbara Cuthbert	20180508-5107	GEN-27
IND-541	Barbara Cuthbert	20180508-5108	AIR-4, AIR-5, AIR-18
IND-542	Barbara Cuthbert	20180508-5109	GW-5, SAFE-11, GEN-10
IND-543	Harsh Bhargava	20180508-5114	SAFE-10
IND-544	Elizabeth A. Roedell	20180508-5167; 20180517-0009	GEN-10, T&E-1
IND-545	Kathryn Riss	20180509-5001	CI-9, SAFE-11, SAFE-10
IND-546	Marissa Ferber	20180509-5002	AQU-9
IND-547	Alexa Rivadeneira	20180509-5003	SAFE-10
IND-548	Lily Gordon	20180509-5004	SAFE-1, SAFE-10
IND-549	Bridgette Kunst	20180509-5005	AIR-4
IND-550	John Muth	20180509-5006	SAFE-10, SAFE-1
IND-551	Arnold Hammerschlag	20180509-5007	GEN-1
IND-552	Kate Newburger	20180509-5035	GEN-1
IND-553	Linda Novenski	20180509-5046	SAFE-10, GEN-1
IND-554	Sara Gronim	20180509-5047	AQU-1, GEN-21, GEN-10
IND-555	Bob Spirito	20180510-0012	GEN-9
IND-556	John Antoniello	20180510-0013	GEN-9
IND-557	Mark Davis Jr.	20180510-0014	GEN-9
IND-558	Andrew Tagliaferro	20180510-0015	GEN-9
IND-559	Chao-I Chen	20180510-0016	GEN-9
IND-560	Nicholas Blevins	20180510-0017	GEN-9
IND-561	Warren Smith	20180510-0018	GEN-9
IND-562	Mason Resende	20180510-0019	GEN-9
IND-563	Chris Kenny	20180510-0020	GEN-9
IND-564	Edward Scanlon	20180510-0021	GEN-9
IND-565	Tom Princiotta	20180510-0022	GEN-9
IND-566	Kevin McLaughlin	20180510-0023	GEN-9
IND-567	Daniel Egan	20180510-0024	GEN-9
IND-568	Taylor Allen	20180510-0025	GEN-9
IND-569	Angelo Miragliotta	20180510-0026	GEN-9

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IND-570	Eric Kuenze	20180510-0027	GEN-9
IND-571	Cooper Sisco	20180510-0028	GEN-9
IND-572	Denton Kampa	20180510-0029	GEN-9
IND-573	Rob Spahr	20180510-0030	GEN-9
IND-574	Brittany Rappleyea	20180510-0031	GEN-9
IND-575	William Reynolds	20180510-0032	GEN-9
IND-576	John McLaughlin	20180510-0033	GEN-9
IND-577	Nicholas Branstner	20180510-0034	GEN-9
IND-578	Felice Morello	20180510-0035	GEN-9
IND-579	John Yuhas	20180510-0036	GEN-9
IND-580	James Buchany	20180510-0037	GEN-9
IND-581	Mario J. Fonseca	20180510-0038	GEN-9
IND-582	Cornelius Springvloed	20180510-0039	GEN-9
IND-583	Ubaldo Acosta	20180510-0040	GEN-9
IND-584	Shawn Conway	20180510-0041	GEN-9
IND-585	Victor Livingston	20180510-0042	GEN-9
IND-586	Steven Feaser	20180510-0043	GEN-9
IND-587	William Vaccaro	20180510-0044	GEN-9
IND-588	Marvis Horne	20180510-0045	GEN-9
IND-589	Joao Ferrera	20180510-0046	GEN-9
IND-590	John Ferrera	20180510-0047	GEN-9
IND-591	David Ortega	20180510-0048	GEN-9
IND-592	Lino Santiago	20180510-0049	GEN-9
IND-593	David Zack	20180510-0050	GEN-9
IND-594	Chris Bohlke	20180510-0051	GEN-9
IND-595	Mark Davis	20180510-0052	GEN-9
IND-596	Michael Corroan	20180510-0053	GEN-9
IND-597	Joe Glova	20180510-0054	GEN-9
IND-598	Andrew DiPalma	20180510-0055	GEN-9
IND-599	Anthony Cremone	20180510-0056	GEN-9
IND-600	Michael Tufaro	20180510-0057	GEN-9

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IND-602	Joe Graham	20180510-0059	GEN-9
IND-603	John Yuhas	20180510-0060	GEN-9
IND-604	Kolby Mitchell	20180510-0061	GEN-9
IND-605	David Ortega	20180510-0062	GEN-9
IND-606	Eric Pene	20180510-0063	GEN-9
IND-607	Al Zabicki	20180510-0064	GEN-9
IND-608	Justin Jones	20180510-0065	GEN-9
IND-609	Rupali Chakravarti	20180509-0011	SAFE-11, SAFE-4, SAFE-16, SAFE-10, AIR-3, GW-2, NOISE-1
IND-610	Robert B. Kutch	20180509-5057	AIR-4
IND-611	Nancy Moirano	20180509-5058	AIR-4
IND-612	Nancy Moirano	20180509-5068	SAFE-10, SAFE-6, SAFE-15, GW-6, SAFE-16, SAFE-4
IND-613	Marissa Weber	20180509-5098	SAFE-10
IND-614	Ellen Pristach	20180509-5105	AQU-1, GEN-10
IND-615	Consuelo Arburg	20180510-0007	GEN-1, SAFE-17, ALTS-4
IND-616	Cesar Del Valle	20180510-5002	CI-9, GEN-43
IND-617	Alyssa Malin	20180510-5003	AQU-9, AQU-1, CI-9, GEN-2
IND-618	Leslie Lanphear	20180510-5004	GEN-10
IND-619	Thomas J. Vajtay	20180510-5005	SAFE-10, GEN-10
IND-620	Leslie Lanphear	20180510-5006	AIR-3, CI-7
IND-621	Leslie Lanphear	20180510-5007	GEN-28, GEN-10
IND-622	Noelle Picone	20180510-5008	AQU-1
IND-623	Leslie Lanphear	20180510-5009	SAFE-10
IND-624	Vinod Gupta	20180510-5010	AIR-3
IND-625	Shilpa Gone	20180510-5011	GEN-10
IND-626	Hamid Mukhtar	20180510-5012	GEN-10
IND-627	Lisa Baskin-Corl	20180510-5037	GEN-10
IND-628	Ankit Desai	20180510-5038	GEN-10
IND-629	Barbara Cuthbert	20180510-5052	AQU-1, LU-12, AQU-12, GEN-10
IND-630	Nishita Shah	20180510-5056	GEN-10

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IND-631	Ankita Passawala	20180510-5069	GEN-10
IND-632	Don Perry	20180510-5071	SAFE-1, CI-2, ALTS-4
IND-633	Sirisha Maganti	20180510-5075	SAFE-10, SAFE-4, AIR-3
IND-634	Grace B. Ramus	20180510-5085	AIR-3
IND-635	Dan Ling	20180510-5086	GEN-10, GEN-1
IND-636	Grace B. Ramus	20180510-5087	SAFE-4, SAFE-11, SAFE-10
IND-637	Grace B. Ramus	20180510-5089	GEN-1
IND-638	Grace B. Ramus	20180510-5096	GEN-10
IND-639	Edith Kantrowitz	20180510-5115	CI-9
IND-640	Rory Moon	20180510-5127	SAFE-10
IND-641	JJ Mistretta	20180510-5162	GEN-1
IND-642	Vasif Nagarwala	20180510-5164	GEN-10
IND-643	Linda R. Powell	20180510-5168	GEN-10
IND-644	Bernice Gordon	20180510-5170	GEN-10
IND-645	Robert J. Laumbach	20180510-5176	AIR-4
IND-646	Vinod Gupta	20180510-5183	GEN-10
IND-647	Linda R. Powell	20180510-5184	AIR-3
IND-648	Linda R. Powell	20180510-5185	AIR-4
IND-649	Carl Bien	20180511-5000	GEN-10
IND-650	Niyati Oza	20180511-5002	GEN-10
IND-651	Mina Oza	20180511-5003	GEN-10
IND-652	Jaimini Oza	20180511-5004	GEN-10
IND-653	Kimberly Francois	20180511-5005	AIR-3
IND-654	Linda R. Powell	20180511-5006	GEN-10, WILD-12
IND-655	Linda R. Powell	20180511-5007	SAFE-11
IND-656	Linda R. Powell	20180511-5008	SAFE-4
IND-657	Linda R. Powell	20180511-5009	GW-5
IND-658	Linda R. Powell	20180511-5010	LU-4
IND-659	Amitabh Patil	20180511-5011	GEN-10

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IND-660	Miriam E. Rogers	20180511-5012	GEN-2, ALTS-12, LU-14, SAFE-11, SAFE-9, SOCIO-8, SAFE-15, SOCIO-3, SOCIO-7, NOISE-1, AIR-3, AIR-16, GW-2, GEO-1, WILD-1
IND-661	Francois Bronsard	20180511-5013	GEN-28, GEN-10
IND-662	A. Nap	20180511-5014	GEN-10
IND-663	Janak Pandit	20180511-5017	SAFE-10, SAFE-4, SAFE-11, GW-2, CI-7, AIR-3, LU-7, WILD-1, GEN-3, SOCIO-10, GEN-2, GEN-10
IND-664	Ratna Pandit	20180511-5019	SAFE-10, SAFE-4, SAFE-11, GW-2, CI-7, AIR-3, LU-7, WILD-1, GEN-3, SOCIO-10, GEN-2, GEN-10
IND-665	Hari Krishnan	20180511-5020	SAFE-10, SAFE-4, SAFE-11, GW-2, CI-7, AIR-3
IND-666	Jennifer L. Tobin	20180511-5022	AIR-4, AIR-18, AIR-5, SAFE-11, SAFE-10, NOISE-1
IND-667	Laxman Kanduri	20180511-5029	GEN-10
IND-668	Rohit Kothlapuram	20180511-5035	GEN-10
IND-669	Andrea Walker	20180511-5082	GEN-10
IND-670	Barbara Cuthbert	20180511-5084	AIR-4
IND-671	Barbara Cuthbert	20180511-5086	GEN-27
IND-672	John Weber	20180511-5087	GEN-10
IND-673	Adam Gross	20180511-5088	GEN-10
IND-674	AE Petrilla	20180511-5089	GEN-10
IND-675	Akiba Lubow	20180511-5090	GEN-10
IND-676	Alan Gross	20180511-5091	GEN-10
IND-677	Alice Ciuffo	20180511-5092	GEN-10
IND-678	Alix Bacon	20180511-5093	GEN-10
IND-679	Allan Goldstein	20180511-5094	GEN-10
IND-680	Amy Diodato	20180511-5095	GEN-10
IND-681	Amy Gehringer	20180511-5096	GEN-10
IND-682	Amy Zirkle RN	20180511-5099	GEN-10
IND-683	Andrea Hart	20180511-5100	GEN-10
IND-684	Andrea Walker	20180511-5101	GEN-10
IND-685	Andrea Wallace	20180511-5102	GEN-10
IND-686	John Weber	20180511-5108	AQU-23
IND-687	Angelika Ghosh	20180511-5114	GEN-10

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IND-688	Melissa Morrone	20180511-5116	CI-9
IND-689	James A. Colquist	20180514-5008	GEN-28, SOCIO-1, AIR-17
IND-690	Robert Heyer	20180514-5009	SAFE-11, AIR-3, AQU-9, CI-9
IND-691	Michael Kanarek	20180510-4003 (May 2 comment session)	SAFE-11
IND-692	Gabriel S. Traylor	20180510-4003 (May 2 comment session)	GEN-10
IND-693	Philip M. Wisneski	20180510-4003 (May 2 comment session)	AIR-3, WILD-1
IND-694	Elizabeth Romanaux	20180510-4003 (May 2 comment session)	WILD-1, SURF-1
IND-695	Kathryn J. Riss	20180510-4003 (May 2 comment session)	CI-9, GEN-10, AIR-4, SAFE-11, GW-6, SAFE-10
IND-696	Carolyn Nia Kelly	20180510-4003 (May 2 comment session)	GEN-1, NOISE-1, WILD-1, SURF-2
IND-697	Pradip Chakravarti	20180510-4003 (May 2 comment session)	AIR-4, SAFE-1, AIR-3, SAFE-11, SAFE-4, SAFE-10
IND-698	No name given (I have concerns about...)	20180510-4003 (May 2 comment session)	LU-4, SAFE-6, SAFE-11, SAFE-10, GEN-10
IND-699	Carolyn Wells	20180510-4003 (May 2 comment session)	AIR-3, SURF-2, SAFE-1, ALTS-4
IND-700	Bochin Shu	20180510-4003 (May 2 comment session)	SAFE-11, AIR-3
IND-701	Sherry Lau	20180510-4003 (May 2 comment session)	SAFE-1, AIR-3, SURF-2

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IND-702	Holly Hardaway	20180510-4003 (May 2 comment session)	AIR-3
IND-703	Kenneth R. Bak	20180510-4003 (May 2 comment session)	AIR-4
IND-704	Erica Anderson	20180510-4003 (May 2 comment session)	SAFE-1, SOCIO-1
IND-705	Francis Trimpert	20180510-4003 (May 2 comment session)	SAFE-1
IND-706	Janet Solondz	20180510-4003 (May 2 comment session)	AIR-3
IND-707	Wije Kottahachchi	20180510-4003 (May 2 comment session)	SAFE-1, LU-7
IND-708	Vineeta Sramaner	20180510-4003 (May 2 comment session)	LU-7, SAFE-1
IND-709	Vijitha Embilipitili	20180510-4003 (May 2 comment session)	GEN-1, AIR-3
IND-710	Annette P. Johnson	20180510-4003 (May 2 comment session)	NOISE-1, SAFE-1, SAFE-4
IND-711	Kimberly Francois	20180510-4003 (May 2 comment session)	AIR-3
IND-712	Rozalyn Sherman	20180510-4003 (May 2 comment session)	SAFE-11, SAFE-4, AIR-3
IND-713	Patricia W. Cross	20180510-4003 (May 2 comment session)	SAFE-1, SAFE-16

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IND-714	R. Andrew Bleloch	20180510-4003 (May 2 comment session)	ALTS-18
IND-715	Suvendra N. Tiwari	20180510-4003 (May 2 comment session)	AIR-3, SAFE-11, SAFE-14, SAFE-1, SAFE-15
IND-716	Latha Ramineni	20180510-4003 (May 2 comment session)	SAFE-1, NOISE-1, SURF-2, AIR-5, CI-7, VEG-1
IND-717	Dhanapal S. Kongara	20180510-4003 (May 2 comment session)	SAFE-1, NOISE-1, GEN-1, SURF-2, ALTS-12
IND-718	Michael L. Jacawsky	20180510-4003 (May 2 comment session)	SAFE-11, GW-5, AIR-5, SAFE-1, SAFE-15, SOCIO-7, LU-13
IND-719	Donna Mostel	20180510-4003 (May 2 comment session)	SAFE-11, GW-5, AIR-5, SAFE-1, SAFE-15, SOCIO-7
IND-720	Rosa Almi Aquino	20180510-4003 (May 2 comment session)	AIR-3, CI-9, SURF-2, GEN-2, NOISE-1, GEN-1
IND-721	Ellen Dunn	20180510-4003 (May 2 comment session)	AIR-3, SAFE-1, SAFE-6, GEN-1
IND-722	Vinod Gupta	20180510-4003 (May 2 comment session)	AIR-3, SAFE-11, GEN-10
IND-723	Subhashis Banerjee, MD	20180510-4003 (May 2 comment session)	AIR-3, AIR-4
IND-724	Michael Kunst	20180510-4003 (May 2 comment session)	AIR-3, GEN-1, SAFE-1
IND-725	Kevin Corcoran	20180510-4003 (May 2 comment session)	GW-6

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IND-726	Eric J. Henderson (Theresa's Farm)	20180510-4003 (May 2 comment session)	AIR-5, SAFE-11, SOCIO-1
IND-727	Aniko Somogyi (Theresa's Farm)	20180510-4003 (May 2 comment session)	SAFE-4, SAFE-10, ALTS-12
IND-728	Dr. Bijal Desai	20180510-4003 (May 2 comment session)	AIR-3
IND-729	Rajiv Prasad	20180510-4003 (May 2 comment session)	GEN-10, AIR-4
IND-730	Larry Klein	20180510-4003 (May 2 comment session)	SAFE-11, SAFE-4, GW-6, GW-5, LU-4
IND-731	Daniel Ortega	20180510-4003 (May 2 comment session)	GEN-9
IND-732	John David Muth	20180510-4003 (May 2 comment session)	GEN-2, SAFE-1, SAFE-4, SURF-1, NOISE-1, WILD-1
IND-733	Cecille de Laurentis	20180510-4003 (May 2 comment session)	AIR-3, ALTS-4
IND-734	Janis Bozowski	20180510-4003 (May 2 comment session)	SAFE-10, GEN-21, GEN-10, GEN-24, GEN-32, AIR-4, AIR-5, GEN-2, ALTS-4
IND-735	Jagdish Vasudev	20180510-4003 (May 2 comment session)	AIR-3, AIR-5, SAFE-17, SAFE-15, GW-6, SAFE-4
IND-736	Kristi Reed	20180510-4003 (May 2 comment session)	ALTS-4, GEN-1, SAFE-1, AIR-3, SAFE-11
IND-737	Francis Khoury	20180510-4003 (May 2 comment session)	CI-9, AIR-3, SAFE-1, VEG-1, LU-20, NOISE-1, ALTS-4

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IND-738	Barrington Cross	20180510-4003 (May 2 comment session)	GEN-1, AIR-3, GW-6, SAFE-16, SAFE-11
IND-739	James Colquist	20180510-4003 (May 2 comment session)	AIR-3, GEN-32
IND-740	No Name given (Establishing a compressor station...)	20180510-4003 (May 2 comment session)	SAFE-10, SAFE-17, SAFE-1, SAFE-15, AIR-3, SOCIO-1, GEN-1, ALTS-12
IND-741	Laura G. Kogan	20180510-4003 (May 2 comment session)	SAFE-1, GEN-1, SOCIO-1, NOISE-1
IND-742	Sophia A. Emmet	20180510-4003 (May 2 comment session)	NOISE-1, AIR-3, GEN-1
IND-743	Daniel Lima	20180510-4003 (May 2 comment session)	GEN-1, ALTS-4, CI-9
IND-744	Julie Higgins	20180510-4003 (May 2 comment session)	GEN-1
IND-745	Ruth Hansen (several pages typed)	20180510-4003 (May 2 comment session)	SAFE-22, GEN-6, GEN-6
IND-746	Linda Powell (Statement:..., news article, medical info)	20180510-4003 (May 2 comment session)	GEN-1, AIR-3
IND-747	Arnold Schmidt	20180510-4003 (May 2 comment session)	NOISE-2, NOISE-4, GEN-21
IND-748	Grace Ramus	20180510-4003 (May 2 comment session)	SAFE-1, SAFE-11, GW-5, LU-13, AIR-3, NOISE-1, SAFE-4, SAFE-10, GEN-1
IND-749	Wayne Martiak	20180510-4003 (May 2 comment session)	GEN-9
IND-750	John Weber	20180511-5117	SOCIO-12

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IND-751	Nishita Shah	20180511-5118	GEN-10
IND-752	Ellen Pristach	20180511-5149	GEN-10, WILD-12
IND-753	Ellen Pristach	20180511-5150	GEN-10
IND-754	Ellen Pristach	20180511-5151 [same as 20180510-5008]	AQU-1
IND-755	Ashley Fallon	20180511-5160	CI-9
IND-756	John Weber	20180511-5192	AQU-1
IND-757	Daurie Pollitto	20180511-5194	GEN-3
IND-758	Lisa M. Gallaudet	20180511-5202 [see also 20180510-5008]	SAFE-10, AQU-9, GEN-3, AQU-1
IND-759	John Weber	20180511-5217	CI-9
IND-760	Thomas Ross	20180511-5247	CI-9
IND-761	Kaushal	20180514-5013	GEN-1
IND-762	Sapan Shah	20180514-5015	GEN-10
IND-763	Naumita Shah	20180514-5016	GEN-10
IND-764	Noelle Picone	20180514-5017	CI-9
IND-765	Sarah Gentile	20180514-5018	SAFE-10
IND-766	Raj Kapoor	20180514-5020	GEN-10
IND-767	Robert Wood	20180514-5021	GEN-10, GEN-43
IND-768	Donna Knipp	20180514-5022	SAFE-10
IND-769	Michael Garda	20180514-5023	GEN-1
IND-770	Jason Latos	20180514-5024	CI-9
IND-771	Karoly Csatorday	20180514-5025	GEN-10
IND-772	Antonia Pena	20180514-5026	GEN-10
IND-773	Roger Prince	20180514-5027	GEN-9
IND-774	Vinod Gupta	20180514-5028	GEN-10
IND-775	Wendy Brawer	20180514-5029	GEN-1
IND-776	Gyan Bhanot	20180514-5030	GEN-10
IND-777	Rohit Kinger	20180514-5031	GEN-10
IND-778	Lisa Harrison	20180514-5032	AIR-3, CI-9

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IND-779	Lisa Harrison	20180514-5033	CI-9
IND-780	Joyce Picone	20180514-5034	AQU-9
IND-781	Ellen Pristach	20180514-5035, 20180514-5036, 20180514-5177, 20180514-5178, 20180514-5179	GEN-3, AIR-3, CI-9
IND-782	Ellen Pristach	20180514-5037	GEN-3
IND-783	Ranjoy K. Ghosh	20180514-5038	GEN-10
IND-784	Lisa Harrison	20180514-5039	AQU-1
IND-785	Noelle Picone	20180514-5040	SAFE-10
IND-786	Angela N.	20180514-5041	GEN-10
IND-787	Hector S. Nelson	20180514-5042	GEN-10
IND-788	Regina N.	20180514-5043	GEN-1
IND-789	Nelson	20180514-5044	GEN-1
IND-790	Siva Dhandu	20180514-5045	GEN-10
IND-791	Brigitte Kinniburgh	20180514-5046	GEN-10
IND-792	Vinod Gupta	20180514-5047	LU-7
IND-793	Kristy Suh	20180514-5048	GEN-10
IND-794	Avelene Jacobs	20180514-5049	AIR-3
IND-795	Shyam Jha	20180514-5050	AIR-5, GEN-32
IND-796	Edward Fausty	20180514-5051	GEN-1
IND-797	Edith Schultz	20180514-5052	AQU-9
IND-798	Sharad Pande	20180514-5053	GEN-10
IND-799	Sudhir Chilukuri	20180514-5054	SAFE-11
IND-800	Sudhir Chilukuri	20180514-5055	GEN-30
IND-801	Sudhir Chilukuri	20180514-5056	AIR-4
IND-802	Jill Lauri	20180514-5057	SAFE-10, GEN-2, GEN-3
IND-803	Robert B. Kutch	20180514-5058	GEN-29
IND-804	Robert Wood	20180514-5059	GEN-29
IND-805	Robert Malin	20180514-5060	GEN-1
IND-806	Carol P. Kuehn	20180514-5061	GEN-29

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IND-808	Elizabeth A. Roedell	20180514-5064, 20180522-0032	GEN-29
IND-809	Rajendra M. Patel	20180514-5065	GEN-10
IND-810	Elizabeth Watts	20180514-5066	GEN-1
IND-811	Ali-Zain Rahim	20180514-5067	GEN-10
IND-812	Alvaro Alcocer	20180514-5068	CI-9
IND-813	Santosh Satyan	20180514-5069	GEN-10
IND-814	Surendra Nath Tiwari	20180514-5070	AIR-3, SAFE-11, GW-6, SAFE-14, GEN-10
IND-815	Alexandra Hodkowski	20180514-5071	GEN-10
IND-816	Kamini Tiwari	20180514-5072	GEN-10
IND-817	Surendra Nath Tiwari	20180514-5073	GEN-10
IND-818	Kamini Tiwari	20180514-5074	AIR-5, AIR-4
IND-819	Edith Kantrowitz	20180514-5075	SOCIO-12
IND-820	Surendra Nath Tiwari	20180514-5076	SAFE-10, SAFE-11, SAFE-4, GW-2, CI-7, AIR-3, LU-7, GEN-10
IND-821	Kamini Tiwari	20180514-5077	SAFE-10, SAFE-11, SAFE-4, GW-2, CI-7, AIR-3, LU-7, GEN-10
IND-822	Prabhakar Konatham	20180514-5078	GEN-10
IND-823	Judith K. Canepa	20180514-5079	GEN-29, CI-9, SAFE-10
IND-824	Dhira Rauch	20180514-5080	GEN-10
IND-825	Surendra Nath Tiwari	20180514-5081	GEN-29
IND-826	Kamini Tiwari	20180514-5082	GEN-29
IND-827	Michael Gottfried	20180514-5156	ALTS-12, SAFE-4
IND-828	Saurabh Agarwal	20180514-5158	GEN-10
IND-829	Leslie Lanphear	20180514-5166	SOCIO-12
IND-830	Lynn Neuman	20180514-5168	GEN-2
IND-831	Leslie Lanphear	20180514-5170	CI-9
IND-832	Leslie Lanphear	20180514-5171	CI-9
IND-833	Ninad Patel	20180514-5176	GEN-10
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IND-836	Kevin Corcoran	20180514-5957	WILD-12, AIR-14, ALTS-12
IND-837	Lee M. Ziesche	20180514-5180	CI-9
IND-838	Leslie Lanphear	20180514-5181	T&E-1
IND-839	Mary Siegert	20180514-5182	GEN-1
IND-840	Diana J. Thakker	20180514-5183, 20180514-5549, 20180514-5589	AIR-5, AIR-4, AIR-3
IND-841	Lynn Tondrick	20180514-5184	AQU-1
IND-842	Lynn Tondrick	20180514-5185	AQU-23
IND-843	Joseph Reynolds	20180514-5186	SAFE-10
IND-844	Joseph S. Reynolds II	20180514-5187	AQU-1
IND-845	Joseph S. Reynolds II	20180514-5188	SAFE-10
IND-846	Joseph S. Reynolds II	20180514-5189	AQU-9
IND-847	Joseph S. Reynolds II	20180514-5190	AQU-23
IND-848	Joseph S. Reynolds II	20180514-5191	GEN-10
IND-849	Nauman Qureshi	20180514-5192	GEN-10
IND-850	Judith K. Canepa	20180514-5193	GEN-29
IND-851	Judith K. Canepa	20180514-5194	SAFE-10
IND-852	Michael Miyahira	20180514-5196	GEN-3
IND-853	Milly Parekh	20180514-5197	GEN-1
IND-854	Dr. Edward Williams	20180514-5198	CI-9
IND-855	Zhizhou Wang	20180514-5199	NOISE-1, AIR-5
IND-856	Edith Kantrowitz	20180514-5200	AQU-9
IND-857	Leslie Lanphear	20180514-5201	GEN-29
IND-858	Laura Cisar	20180514-5202	GW-2, SAFE-4
IND-859	Laura Cisar	20180514-5203	GEN-29
IND-860	Ross Pinkerton	20180514-5312	GEN-3
IND-861	Harsh Bhargava	20180514-5376	GEN-29
IND-862	Maddie Weikel	20180514-5387	AQU-9, SOCIO-9
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IND-865	Maren Perry	20180514-5520	GEN-29
IND-866	Marissa McDermott	20180514-5535	GEN-1
IND-867	Kathryn Riss	20180514-5550	GEN-29
IND-868	Laura Sheinkopf	20180514-5554	CI-9, AQU-9
IND-869	Spyridon Gouras	20180514-5572	CI-9
IND-870	Rod Brady	20180514-5635	GEN-29
IND-871	Cyril Phillips	20180514-5660	GEN-29, AIR-4
IND-872	Barbara Cuthbert	20180514-5661	GEN-47
IND-873	Barbara Cuthbert	20180514-5664	GEN-29
IND-874	Nishita Shah	20180514-5682	GEN-1
IND-875	Nishita Shah	20180514-5709	GEN-1
IND-876	Edith Kantrowitz	20180514-5771	GEN-1
IND-877	Edward J. Power	20180514-5794	GEN-3
IND-878	Nicole Morris	20180514-5800	SAFE-1
IND-879	Florence Ferguson	20180514-5881	GEN-3, SAFE-10
IND-880	Drew E. Cuthbert	20180514-5944	GEN-29
IND-881	Priscilla Lee	20180514-5945	GEN-29
IND-882	Joyce Picone	20180514-5949	SAFE-10
IND-883	Francois Bronsard	20180514-5950	GEN-29
IND-884	Chintan Shah	20180514-5953	GEN-29
IND-885	Chintan Shah	20180514-5954	GEN-29
IND-886	Jessie B. Lindsay	20180514-5955	GEN-29
IND-887	Kevin Corcoran	20180514-5956	SAFE-1, SAFE-5, SAFE-16, GW-6, SAFE-15
IND-888	Chintan Shah	20180514-5958	GEN-29
IND-889	Chintan Shah	20180514-5959	GEN-29
IND-890	Nishita Shah	20180514-5961	GEN-1
IND-891	Valerie Bell	20180514-5962	GEN-9
IND-892	Gregory Babula	20180514-5963	GEN-1
IND-893	Cheri Stead	20180514-5964	GEN-3, AIR-3, CI-9
IND-894	Joel Berger	20180514-5965	GEN-1

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IND-896	Rebecca Harshbarger	20180514-5973	GEN-1
IND-897	Mary L. Delahanty, Esq	20180514-5975	GEN-10, SAFE-18
IND-898	Colin Kinniburgh	20180514-5997	GEN-1, CI-9
IND-899	Anya	20180514-5998	AQU-9
IND-900	Susan London	20180514-6031	GEN-29
IND-901	Marilyn Harvey	20180514-6048	SAFE-1, GEN-3
IND-902	Jeffrey Fitts	20180514-6050	CI-12
IND-903	Johanna Coxeter	20180514-6064	SAFE-10
IND-904	Nishita Shah	20180514-6088	GEN-1
IND-905	Nancy Gale	20180514-6114	GEN-29
IND-906	Nancy Gale	20180514-6119	GW-7, GEN-3, SAFE-11, SAFE-4, AIR-5, GW-5, GEN-10, AIR-4, ALTS-4
IND-907	Leona Dickerson	20180514-6122	GEN-9
IND-908	R. Tanaka	20180514-6123	AQU-9
IND-909	Jennifer Zarcone	20180514-6124	GEN-2, GEN-3, SAFE-10
IND-910	Claire Chandler	20180514-6126	GEN-1, SOCIO-12
IND-911	Grace B. Ramus	20180514-6128	GEN-29
IND-912	Kevin Corcoran	20180514-6141	SAFE-4
IND-913	Edith Kantrowitz	20180514-6144	CI-9
IND-914	Ian C. Kinniburgh	20180514-6154	CI-9
IND-915	Thomas Green	20180514-6158	GEN-1, GEN-2, AIR-3, GEN-10
IND-916	David Merigala	20180514-6159	GEN-1
IND-917	Poornima Joshi	20180514-6162	GEN-10, GEN-29
IND-918	Kevin Corcoran	20180514-6165	GEN-29
IND-919	Michael Kanarek	20180514-6172	GEN-29
IND-920	Bernadette Maher	20180514-6174	GEN-30
IND-921	Mark Forman	20180514-6175	GEN-29
IND-922	Bernadette Maher	20180514-6178	AIR-3
IND-923	Bernadette Maher	20180514-6179	AIR-4
IND-924	Bernadette Maher	20180514-6180	GEN-10, WILD-12

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IND-926	Lynne O'Carroll	20180515-0019	GEN-56, GEN-1
IND-927	Bernadette Maher	20180515-5000	SAFE-11
IND-928	Laura Cisar	20180515-5004	AIR-3
IND-929	Bernadette Maher	20180515-5006	GW-5
IND-930	Bernadette Maher	20180515-5009	AQU-37
IND-931	Kathy Davis	20180515-5015	SAFE-1
IND-932	Deana Luchs	20180515-5016	GEN-29, GEN-1, SAFE-10
IND-933	Linda R. Powell	20180515-5018	GEN-29
IND-934	Deepa Prasad	20180515-5022	SAFE-10
IND-935	Preetham L. Bilumane	20180515-5023	GEN-3, AIR-3, CI-9
IND-936	Vaidya Balakrishnan	20180515-5027	SAFE-1, SAFE-10, AIR-5, SAFE-11, GEN-2
IND-937	James A. Colquist	20180514-6127	GEN-29
IND-938	Conor MacCourtney	20180515-5039	GEN-3, SOCIO-1
IND-939	Anthony Holmes	20180515-5040	GEN-9
IND-940	Dolores Green	20180515-5041	GEN-9
IND-941	James Vassanella	20180515-5042	GEN-1
IND-942	Luis Cruz	20180515-5044	GEN-9
IND-943	Adlin Hadad	20180515-5045	AQU-9
IND-944	Vatsal Sheth	20180515-5055	GEN-1
IND-945	Miao Yuan Wang	20180515-5058	GEN-10
IND-946	Jagdish Shah	20180515-5059	GEN-1
IND-947	Kevin Chen	20180515-5061	GEN-29, AIR-3
IND-948	Arun K. Upadhyay	20180515-5064	SAFE-4, SAFE-11
IND-949	Smita Upadhyay	20180515-5065	SAFE-4, SAFE-11
IND-950	Carlos Fernandez	20180515-5067	GEN-10
IND-951	Asim Aslam	20180515-5069	GEN-10
IND-952	Nava Friedman	20180515-5072	CI-9
IND-953	Rekha Gupta	20180515-5074	GEN-29
IND-954	B. Arrindell	20180515-5075	AQU-23
IND-955	William Christopher	20180515-5076	GEN-27

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IND-957	Ami Kadakia	20180515-5080	AIR-1
IND-958	Vinod Gupta	20180515-5082	GEN-36
IND-959	Anselm S. Jeevaratnam	20180515-5083	GEN-29
IND-960	Danielle Berger	20180515-5084	AQU-1
IND-961	B. Arrindell	20180515-5085	GEN-3
IND-962	Jeffrey Yang	20180515-5087	GEN-29
IND-963	Angelina Garneva	20180515-5088	GEN-3
IND-964	Nathan Fishman	20180515-5091	GEN-1
IND-965	Edward Potosnak, III	20180515-5093	GEN-29
IND-966	Lakshmi Sridharan	20180515-5094	AIR-4, SAFE-11, SAFE-4, GW-6, SAFE-16, AIR-3
IND-967	Angelina Garneva	20180515-5095	SAFE-10, SAFE-17
IND-968	Rahul Sen	20180515-5096	GEN-2, SAFE-11
IND-969	Phyllis Beals	20180515-5097	GEN-29
IND-970	Angelina Garneva	20180515-5098	CI-9
IND-971	Nikhil Shimpi	20180515-5099, 20180515-5108	GEN-43, CI-9, CI-9, CI-12, GEN-2
IND-972	Kimberly Hauer	20180515-5100	GEN-1
IND-973	Phyllis Beals	20180515-5101	AIR-3
IND-974	Nikhil Shimpi	20180515-5102	SAFE-10
IND-975	Nikhil Shimpi	20180515-5103	CI-9
IND-976	Angelina Garneva	20180515-5104	GEN-2
IND-977	Judith K. Canepa	20180515-5105	CI-9
IND-978	Angelina Garneva	20180515-5106	AQU-23
IND-979	Angelina Garneva	20180515-5107	GEN-10
IND-980	Anna Dillulio	20180516-5040	SAFE-1, GEN-2, ALTS-1
IND-981	Rosemarie Santiesteban	20180515-5109	GEN-1
IND-982	Vanessa Victoria	20180515-5110	AQU-1
IND-983	Gary Makus	20180515-5126	SAFE-1
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IND-986	Lana DelliCarpini	20180515-5266	GEN-10, GEN-1
IND-987	Vijaya Dasari	20180515-5279	GEN-2, LU-7, SAFE-11, WILD-1, GEN-3, AIR-3, CI-7, GW-2, SAFE-4, SOCIO-10, GEN-10, SAFE-10
IND-988	Travis Anderson	20180515-5312	GEN-3
IND-990	Mehul Doshi	20180516-5000	GEN-1
IND-991	Laxmi Reddy	20180514-6152	GEN-10
IND-992	Kanaka Reddy	20180514-6153	GEN-10
IND-993	Giridhar Holenarsipur	20180515-5019	GEN-10
IND-994	Swati Jain	20180515-5025	GEN-10
IND-995	Arun Upadhyay	20180515-5070	GEN-10
IND-996	Smita Upadhyay	20180515-5071	GEN-10
IND-997	Diana J. Thakker	20180515-5115	AQU-9, AQU-1, AQU-32
IND-998	Diana Thakker	20180515-5120	WILD-12, AIR-5, CI-7
IND-999	Vinod Gupta	20180514-5062	GEN-29
IND-1000	Srujana Allada	20180514-5195	GEN-29
IND-1001	Judith Wood	20180514-5204	GEN-29
IND-1002	Abhilash Gandhi	20180514-5205	GEN-29
IND-1003	Nita Gandhi	20180514-5206	GEN-29
IND-1004	Ellen M. Whitt	20180514-5207	GEN-29
IND-1005	Subramani Iyer	20180514-5334	GEN-29
IND-1006	Marvin Quesada	20180514-5525	GEN-29
IND-1007	Nishita Shah	20180514-5617	GEN-29
IND-1008	Patricia Cronheim	20180514-5665	GEN-29
IND-1009	Nishita Shah	20180514-5832	GEN-29
IND-1010	Amitabh Patil	20180514-5900	GEN-29
IND-1011	Dhanapal S. Kongara	20180514-5942	GEN-29
IND-1012	Latha Ramineni	20180514-5943	GEN-29
IND-1013	Akib Ali	20180514-5946	GEN-29
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IND-1017	Chintan Shah	20180514-5952	GEN-29
IND-1018	Neelima Sharma	20180514-5960	GEN-29
IND-1019	Ellen Pristach	20180514-5967	GEN-29
IND-1020	Ellen Pristach	20180514-5968	GEN-29
IND-1021	Ellen Pristach	20180514-5969	GEN-29
IND-1022	Ellen Pristach	20180514-5970	GEN-29
IND-1023	Hemang Shah	20180514-5972	GEN-29
IND-1024	Aiman Laila	20180514-6037	GEN-29, AIR-5, AIR-3, SAFE-1, SAFE-4, AIR-4, AIR-18
IND-1025	Allan Chang	20180514-6068	GEN-29
IND-1026	Mulee Chen	20180514-6080	GEN-29
IND-1027	Shyam Mohan	20180514-6087	GEN-29
IND-1028	Bharat Mital	20180514-6157	GEN-29
IND-1029	Nishita Shah	20180515-5010	GEN-29
IND-1030	Brian Lee	20180515-5017	GEN-29
IND-1031	Lisa Park	20180515-5020	GEN-29
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IND-1037	Sneha Fadia	20180515-5035	GEN-29
IND-1038	Kiran Fadia	20180515-5036	GEN-29
IND-1039	Surya Vempati	20180515-5043	GEN-29
IND-1040	Percy Dumasia	20180515-5046	GEN-29
IND-1041	Vijaya Vempati	20180515-5047	GEN-29
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IND-1049	Vinod Gupta	20180515-5056	GEN-29
IND-1050	Jagdish Shah	20180515-5057	GEN-29
IND-1051	Nishita Shah	20180515-5060	GEN-29
IND-1052	Roopesh Shah	20180515-5062	GEN-29
IND-1053	Roopesh Shah	20180515-5063	GEN-29
IND-1054	Arun Upadhyay	20180515-5066	GEN-29
IND-1055	Smita Upadhyay	20180515-5068	GEN-29
IND-1056	Cheryl L. Bethea	20180515-5073	GEN-29
IND-1057	Paragi Shah	20180515-5079	GEN-29
IND-1058	Anshuni Shah	20180515-5081	GEN-29
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IND-1060	Serena Xu	20180515-5089	GEN-29
IND-1061	Janey DeFreitas	20180515-5092	GEN-29
IND-1062	Diane Heyer	20180515-5136	GEN-29
IND-1063	Heather Heyer	20180515-5139	GEN-29
IND-1064	Jyothirmaye Bandaru	20180515-5186	GEN-29
IND-1065	Denise Lytle	20180514-0014	GEN-3
IND-1066	G.W. Gunner	20180517-0030	GEN-9
IND-1067	Noelle Picone	20180521-5001	GEN-2
IND-1068	Ralph A. Bell	20180522-0016	GEN-9
IND-1069	Florence Carnahan	20180522-5001	GEN-29
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IND-1078	Giuseppe Giammona	20180524-5027	AQU-9
IND-1079	Margarita Estevez	20180524-5048	AQU-32
IND-1080	Kate C. Walker	20180524-5061	GEN-29
IND-1081	Taylor Sinkiewicz	20180525-5000	GEN-29
IND-1082	Jackie Weisberg	20180525-5001	GEN-29
IND-1083	Noelle Picone	20180525-5073	GEN-29
IND-1084	Barbara Cuthbert	20180530-5094	SAFE-1, GW-6
IND-1085	Barbara Cuthbert	20180531-5194	GEN-10, SOCIO-2, GEN-14, CI-1, GEN-39, GEN-44, GEN-42, GEN-21, GEN-23
IND-1086	Thomas Steinberg	20180531-5349	GEN-1
IND-1087	Lynne Weiss	20180601-5004	GEN-30
IND-1088	Lynne Weiss	20180601-5005	AIR-5
IND-1089	Lynne Weiss	20180601-5006	AIR-18
IND-1090	Lynne Weiss	20180601-5007	WILD-12, GEN-10
IND-1091	Lynne Weiss	20180601-5008	SAFE-6, SAFE-10, GEN-10
IND-1092	Lynne Weiss	20180601-5009	GW-5
IND-1093	Lynne Weiss	20180601-5010	AQU-37
IND-1094	Lynne Weiss	20180601-5011	GEN-27
IND-1095	Grace B. Ramus	20180601-5091	GEN-29
IND-1096	Susan Chapin	20180604-5005	CI-9, SOCIO-10, SAFE-1, GEN-3
IND-1097	Iris Schulman	20180604-5006	GEN-29
IND-1098	Drew E. Cuthbert	20180604-5095	GEN-8
IND-1099	Drew E. Cuthbert	20180604-5098	GEN-27
IND-1100	Steven L. Georges	20180607-5026	GEN-1
IND-1101	Carol P. Kuehn	20180607-5054	GEN-10
IND-1102	John Marron	20180501-0037	GEN-56
IND-1103	Peter Bilton	20180501-0037	GEN-56
IND-1104	Albert Valeri	20180501-0037	GEN-56
IND-1105	Elizabeth O'Donovan	20180501-0037	GEN-56

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IND-1107	Alex Kharazi	20180501-0037	GEN-56
IND-1108	William Silversmith	20180501-0037	GEN-56
IND-1109	Yeou-Shiuh Hsu	20180501-0037	GEN-56
IND-1110	Ayesha Mughai	20180501-0037	GEN-56
IND-1111	Zachary Brejmon	20180501-0037	GEN-56
IND-1112	Stephanie Turcios	20180501-0037	GEN-56
IND-1113	Matthew Hersh	20180501-0037	GEN-56
IND-1114	Charles Edmonds	20180501-0037	GEN-56
IND-1115	Diane Beeny	20180501-0037	GEN-56
IND-1116	David Allora	20180501-0037	GEN-56
IND-1117	Derek Schilling	20180501-0037	GEN-56
IND-1118	Ana Pairet	20180501-0037	GEN-56
IND-1119	Charles Glashausig	20180501-0037	GEN-56
IND-1120	Jennifer Staab	20180501-0037	GEN-56
IND-1121	Susan Walker	20180501-0037	GEN-56
IND-1122	Ellen Rosie	20180501-0037	GEN-56
IND-1123	Faith Rost	20180501-0037	GEN-56
IND-1124	Susana Cuyler	20180501-0037	GEN-56
IND-1125	H. Barrier	20180501-0037	GEN-56
IND-1126	H. Mano	20180501-0037	GEN-56
IND-1127	Masin Resnick	20180501-0037	GEN-56
IND-1128	Mark Lesko	20180501-0037	GEN-56
IND-1129	Shelia Shulka	20180501-0037	GEN-56
IND-1130	Alan Degutz	20180501-0037	GEN-56
IND-1131	Angela Lugo	20180501-0037	GEN-56
IND-1132	Anita Skolnick	20180511-5119	GEN-10
IND-1133	Ann Malyon	20180511-5120	GEN-10
IND-1134	Ann Sandritter	20180511-5124	GEN-10
IND-1135	Annalisa Traina	20180511-5126	GEN-10
IND-1136	Artemis Basile	20180511-5127	GEN-10

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IND-1138	B. Greene	20180511-5178	GEN-10
IND-1139	Barbara Cuthbert	20180511-5185	GEN-10
IND-1140	Arthur Mc Donald	20180511-5191	GEN-10
IND-1141	Barbara Erlichson	20180511-5203	GEN-10
IND-1142	Barbara Fishman	20180511-5204	GEN-10
IND-1143	Barbara Lawrence	20180511-5209	GEN-10
IND-1144	Barbara Savoca	20180511-5213	GEN-10
IND-1145	Barbara Trought	20180511-5215	GEN-10
IND-1146	Barbara Andrew	20180511-5216	GEN-10
IND-1147	Bernadette Tourtual	20180511-5220	GEN-10
IND-1148	Bernard Swierszcz	20180511-5223	GEN-10
IND-1149	Bill Beren	20180511-5225	GEN-10
IND-1150	Bill S	20180511-5229	GEN-10
IND-1151	Lynn McAndrew	20180511-5236	GEN-10
IND-1152	Mab Finch	20180511-5238	GEN-10
IND-1153	Marci Gittis	20180511-5240	GEN-10
IND-1154	Margaret Dimitriadis	20180511-5241	GEN-10
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IND-1156	Margaret Wianecki	20180511-5245	GEN-10
IND-1157	Margi Mulligan	20180511-5250	GEN-10
IND-1158	Maria Ambeel	20180511-5251	GEN-10
IND-1159	Marie John	20180511-5252	GEN-10
IND-1160	Marie-Ann Buck	20180511-5253	GEN-10
IND-1161	Marietta Carter	20180511-5254	GEN-10
IND-1162	Marilyn Robeson	20180511-5255	GEN-10
IND-1163	Mark Seidman	20180511-5257	GEN-10
IND-1164	Marlene Knight	20180511-5260	GEN-10
IND-1165	Marsha Zimnoch	20180511-5261	GEN-10
IND-1166	Marshall Hatfield	20180511-5267	GEN-10
IND-1167	Martin Schlager Schlager	20180511-5268	GEN-10

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IND-1169	Mary Anne T Lione	20180514-5209	GEN-10
IND-1170	Mary Hamilton	20180514-5210	GEN-10
IND-1171	Mary Michaels	20180514-5214	GEN-10
IND-1172	Mary Tanasy	20180514-5215	GEN-10
IND-1173	Marya Parral	20180514-5216	GEN-10
IND-1174	Maryann D'Angeli	20180514-5217	GEN-10
IND-1175	Matty Giuliano	20180514-5218	GEN-10
IND-1176	Maureen Levier	20180514-5219	GEN-10
IND-1177	Maureen Porcelli	20180514-5220	GEN-10
IND-1178	Meg Sleeper	20180514-5221	GEN-10
IND-1179	Michael Balsai	20180514-5222	GEN-10
IND-1180	Michael Buccieri	20180514-5223	GEN-10
IND-1181	Michael Luderitz	20180514-5226	GEN-10
IND-1182	Michael Odell	20180514-5227	GEN-10
IND-1183	Michael Paul	20180514-5228	GEN-10
IND-1184	Michael Puzio	20180514-5229	GEN-10
IND-1185	Michael Zuckerman	20180514-5230	GEN-10
IND-1186	Mike Albar	20180514-5231	GEN-10
IND-1187	Mike Kelly	20180514-5232	GEN-10
IND-1188	Mitzi Deitch	20180514-5233	GEN-10
IND-1189	MJ Cittadino	20180514-5234	GEN-10
IND-1190	Nancy Hemingway	20180514-5235	GEN-10
IND-1191	Nichole Anderson	20180514-5236	GEN-10
IND-1192	Norman Lebovits	20180514-5237	GEN-10
IND-1193	Patricia Cipolla	20180514-5238	GEN-10
IND-1194	Patricia Delehey	20180514-5239	GEN-10
IND-1195	Patricia Hernandez	20180514-5240	GEN-10
IND-1196	Patricia Miller	20180514-5241	GEN-10
IND-1197	Patricia Shanley	20180514-5242	GEN-10
IND-1198	Paul Riley	20180514-5243	GEN-10

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IND-1200	Bonnie Stanics	20180514-5245	GEN-10
IND-1201	Brandon Schwartz	20180514-5246	GEN-10
IND-1202	Brenda Carmichael	20180514-5247	GEN-10
IND-1203	Brian Cochilla	20180514-5248	GEN-10
IND-1204	Brian Diviney	20180514-5251	GEN-10
IND-1205	Brian Reynolds	20180514-5252	GEN-10
IND-1206	Brian Teare	20180514-5253	GEN-10
IND-1207	Peter Burval	20180514-5254	GEN-10
IND-1208	Bruce Reim	20180514-5256	GEN-10
IND-1209	Peter McCarthy	20180514-5257	GEN-10
IND-1210	Peter Miles	20180514-5259	GEN-10
IND-1211	Petr Khlyabich	20180514-5260	GEN-10
IND-1212	Renate Strub	20180514-5261	GEN-10
IND-1213	Rick Egresitz	20180514-5262	GEN-10
IND-1214	Rick Santana	20180514-5264	GEN-10
IND-1215	Robert Pfeffer	20180514-5265	GEN-10
IND-1216	Robert Scardapane	20180514-5266	GEN-10
IND-1217	Rodanthi Kucharski	20180514-5267	GEN-10
IND-1218	Roger Thorpe	20180514-5268	GEN-10
IND-1219	Ronald Harkov	20180514-5269	GEN-10
IND-1220	Ronald Sverdlove	20180514-5270	GEN-10
IND-1221	Rosalie Murray	20180514-5271	GEN-10
IND-1222	Roy Conard	20180514-5272	GEN-10
IND-1223	Ruth Boroshok	20180514-5273	GEN-10
IND-1224	Ruth Kram	20180514-5274	GEN-10
IND-1225	Jennifer B Tessieri	20180514-5276	GEN-10
IND-1226	Jeanne Rothwarf	20180514-5277	GEN-10
IND-1227	Jennifer Shenkman	20180514-5278	GEN-10
IND-1228	Jeffrey Demby	20180514-5279	GEN-10
IND-1229	Jeremy Carpenter	20180514-5280	GEN-10

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IND-1231	Jessica Anderson	20180514-5282	GEN-10
IND-1232	Jim Amon	20180514-5283	GEN-10
IND-1233	Jo Ann McGreevy	20180514-5284	GEN-10
IND-1234	Joann Ramos	20180514-5285	GEN-10
IND-1235	Joanne Chisholm	20180514-5286	GEN-10
IND-1236	Joanne Smolen	20180514-5287	GEN-10
IND-1237	Joe Raich	20180514-5288	GEN-10
IND-1238	John D'Agostino	20180514-5289	GEN-10
IND-1239	Candace Bassat	20180514-5290	GEN-10
IND-1240	Carmen Dinescu	20180514-5291	GEN-10
IND-1241	Caro Urquhart	20180514-5292	GEN-10
IND-1242	Carol Abrams	20180514-5293	GEN-10
IND-1243	Carol Ellis	20180514-5294	GEN-10
IND-1244	Carol Mueller	20180514-5295	GEN-10
IND-1245	Carolyn Breakemridge	20180514-5296	GEN-10
IND-1246	Cathleen Litvack	20180514-5297	GEN-10
IND-1247	Charles Thomas	20180514-5298	GEN-10
IND-1248	Charles Ward	20180514-5299	GEN-10
IND-1249	Chris Scholl	20180514-5300	GEN-10
IND-1250	Christine Harris	20180514-5301	GEN-10
IND-1251	Christine Koehler	20180514-5302	GEN-10
IND-1252	John Skrobe	20180514-5303	GEN-10
IND-1253	John Thonet	20180514-5304	GEN-10
IND-1254	Joseph Altavilla	20180514-5305	GEN-10
IND-1255	Joseph Spina	20180514-5306	GEN-10
IND-1256	Joser Ibanez	20180514-5307	GEN-10
IND-1257	Joshua Liu	20180514-5308	GEN-10
IND-1258	Joshua Noreuil	20180514-5309	GEN-10
IND-1259	Joy Meola	20180514-5310	GEN-10
IND-1260	Joyce Appel	20180514-5311	GEN-10

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IND-1262	Judy Dorfman	20180514-5314	GEN-10
IND-1263	Julia Cranmer	20180514-5315	GEN-10
IND-1264	Julianna Williams	20180514-5316	GEN-10
IND-1265	Karen Breny	20180514-5317	GEN-10
IND-1266	Karen Diehl	20180514-5318	GEN-10
IND-1267	Karen Elias	20180514-5319	GEN-10
IND-1268	Karen Hauck	20180514-5320	GEN-10
IND-1269	Karen Taylor-Ogren	20180514-5321	GEN-10
IND-1270	Karl Traul	20180514-5322	GEN-10
IND-1271	Karly Mintz	20180514-5323	GEN-10
IND-1272	Katherine Von Rodeck	20180514-5324	GEN-10
IND-1273	Kathi Cooley	20180514-5325	GEN-10
IND-1274	Kathleen Seltzer	20180514-5326	GEN-10
IND-1275	Kathy Vercande	20180514-5327	GEN-10
IND-1276	Kelley Moonwater-Herr	20180514-5328	GEN-10
IND-1277	Kelly Riley	20180514-5329	GEN-10
IND-1278	Ken Eberts	20180514-5330	GEN-10
IND-1279	Kenneth C. Grosso	20180514-5331	GEN-10
IND-1280	Kevin Fairbanks	20180514-5332	GEN-10
IND-1281	Kevin Oneill	20180514-5333	GEN-10
IND-1282	Kim Hanadel	20180514-5335	GEN-10
IND-1283	Kristen Errickson	20180514-5336	GEN-10
IND-1284	S G	20180514-5337	GEN-10
IND-1285	Sandra Bieniek	20180514-5338	GEN-10
IND-1286	Sandra Garcia	20180514-5339	GEN-10
IND-1287	Sandra Gay	20180514-5340	GEN-10
IND-1288	Sandra Madon	20180514-5341	GEN-10
IND-1289	Sandy Pelland	20180514-5342	GEN-10
IND-1290	Sarah Dougan	20180514-5343	GEN-10
IND-1291	Sarah Lael	20180514-5344	GEN-10

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IND-1293	Sharon Beres	20180514-5346	GEN-10
IND-1294	Sharon Tozzi	20180514-5347	GEN-10
IND-1295	Shaula Woehlcke	20180514-5348	GEN-10
IND-1296	Shawn Liddick	20180514-5349	GEN-10
IND-1297	Sheila McGinn	20180514-5350	GEN-10
IND-1298	Shirley Bensetler	20180514-5351	GEN-10
IND-1299	Simone Acque	20180514-5352	GEN-10
IND-1300	Stacey Marchig	20180514-5353	GEN-10
IND-1301	Stamatina Podes	20180514-5354	GEN-10
IND-1302	Stephanie Eckert	20180514-5355	GEN-10
IND-1303	Stephanie Seymour	20180514-5356	GEN-10
IND-1304	Stephen Hirsch	20180514-5357	GEN-10
IND-1305	Stephen Pittman	20180514-5358	GEN-10
IND-1306	Stephen Smith	20180514-5359	GEN-10
IND-1307	Stephen Young	20180514-5360	GEN-10
IND-1308	Steve Lange	20180514-5361	GEN-10
IND-1309	Steve Lederman	20180514-5362	GEN-10
IND-1310	Steve Miller	20180514-5363	GEN-10
IND-1311	Steve Troyanovich	20180514-5364	GEN-10
IND-1312	Susan Cenci	20180514-5365	GEN-10
IND-1313	Susan Chenelle	20180514-5366	GEN-10
IND-1314	Susan Clark	20180514-5367	GEN-10
IND-1315	Suzanne Vanleeuwen	20180514-5368	GEN-10
IND-1316	Takako Ishii-Kiefer	20180514-5369	GEN-10
IND-1317	Terese Buchanan	20180514-5370	GEN-10
IND-1318	Terry Cooper	20180514-5371	GEN-10
IND-1319	Terry Edlefsen	20180514-5372	GEN-10
IND-1320	Terry Friedman	20180514-5373	GEN-10
IND-1321	Terry Schuster	20180514-5374	GEN-10
IND-1322	Thomas Koven	20180514-5375	GEN-10

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IND-1324	Thomss Morgan	20180514-5378	GEN-10
IND-1325	David Mikkelsen	20180514-5379	GEN-10
IND-1326	Cori Bishop	20180514-5380	GEN-10
IND-1327	Christine Papp	20180514-5381	GEN-10
IND-1328	Catherine Pike	20180514-5382	GEN-10
IND-1329	Camille Marakovitz	20180514-5383	GEN-10
IND-1330	Brandon Burrell	20180514-5384	GEN-10
IND-1331	Barbara Morrison	20180514-5385	GEN-10
IND-1332	Ardaman Singh	20180514-5386	GEN-10
IND-1333	A Rossner	20180514-5388	GEN-10
IND-1334	Inbal Israeli Miller	20180514-5389	GEN-10
IND-1335	j Schwart	20180514-5390	GEN-10
IND-1336	James Hemm	20180514-5391	GEN-10
IND-1337	James Tomczyk	20180514-5392	GEN-10
IND-1338	Jamie Greer	20180514-5393	GEN-10
IND-1339	Janet Bischak	20180514-5394	GEN-10
IND-1340	Janet Shannon	20180514-5395	GEN-10
IND-1341	Jann Jasper	20180514-5396	GEN-10
IND-1342	Jason Kemple	20180514-5397	GEN-10
IND-1343	Jaszmene Smith	20180514-5398	GEN-10
IND-1344	Jean Falvo	20180514-5399	GEN-10
IND-1345	Ada Brunner	20180514-5400	GEN-10
IND-1346	Adam Nolan	20180514-5401	GEN-10
IND-1347	Adriana Nunez	20180514-5402	GEN-10
IND-1348	Alison Porter	20180514-5403	GEN-10
IND-1349	Allan Vogt	20180514-5404	GEN-10
IND-1350	Alyson Waldinger	20180514-5405	GEN-10
IND-1351	Amy Steinberg	20180514-5406	GEN-10
IND-1352	Angie F	20180514-5407	GEN-10
IND-1353	Ann Klemme	20180514-5408	GEN-10

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IND-1355	Anne Kantor	20180514-5411	GEN-10
IND-1356	Anthony Cacciapuoti	20180514-5412	GEN-10
IND-1357	Anuradha M Hansen	20180514-5413	GEN-10
IND-1358	Timothy Block	20180514-5414	GEN-10
IND-1359	Arlene Aughey	20180514-5415	GEN-10
IND-1360	Bambi Magie	20180514-5416	GEN-10
IND-1361	Tom Beatini	20180514-5417	GEN-10
IND-1362	Barbara Callahan	20180514-5418	GEN-10
IND-1363	Barbara Miller	20180514-5419	GEN-10
IND-1364	Tom Harris	20180514-5420	GEN-10
IND-1365	Beatrice Cohen	20180514-5421	GEN-10
IND-1366	Bernadette Maher	20180514-5422	GEN-10
IND-1367	Tom Power	20180514-5423	GEN-10
IND-1368	Beverly Railsback	20180514-5424	GEN-10
IND-1369	Tracy Carcione	20180514-5425	GEN-10
IND-1370	Bonnie Strain	20180514-5426	GEN-10
IND-1371	Valerie Finkel	20180514-5427	GEN-10
IND-1372	Brett Rodriguez	20180514-5428	GEN-10
IND-1373	Brian de Castro	20180514-5429	GEN-10
IND-1374	Christine Mueller	20180514-5430	GEN-10
IND-1375	Brian Wright	20180514-5431	GEN-10
IND-1376	Bruce Bird	20180514-5432	GEN-10
IND-1377	Bruce Gordon	20180514-5433	GEN-10
IND-1378	Christine Vissering	20180514-5434	GEN-10
IND-1379	Corey Schade	20180514-5435	GEN-10
IND-1380	Bruce McGlynn	20180514-5436	GEN-10
IND-1381	Vera Lazar	20180514-5438	GEN-10
IND-1382	Bryn Hammarstrom	20180514-5439	GEN-10
IND-1383	Carl Oerke Jr	20180514-5440	GEN-10
IND-1384	Carol Cronheim	20180514-5441	GEN-10

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IND-1386	Carol Kuehn	20180514-5443	GEN-10
IND-1387	Carolyn Robinson	20180514-5444	GEN-10
IND-1388	Dan Parillo	20180514-5445	GEN-10
IND-1389	Catharine Flaherty	20180514-5446	GEN-10
IND-1390	V Frankie	20180514-5447	GEN-10
IND-1391	Caza Lindsey	20180514-5448	GEN-10
IND-1392	Victor Sytzko	20180514-5449	GEN-10
IND-1393	Daniel Kurz	20180514-5450	GEN-10
IND-1394	Vincent Meghdir	20180514-5451	GEN-10
IND-1395	Walter Kobin	20180514-5452	GEN-10
IND-1396	Daniel van Kammen	20180514-5453	GEN-10
IND-1397	Wayne Obetz	20180514-5454	GEN-10
IND-1398	Wendy Bogle	20180514-5455	GEN-10
IND-1399	Wendy Lukowitz	20180514-5456	GEN-10
IND-1400	Darlene Dynega	20180514-5457	GEN-10
IND-1401	William Hart	20180514-5458	GEN-10
IND-1402	L. Helaudais	20180514-5459	GEN-10
IND-1403	William Welkowitz	20180514-5460	GEN-10
IND-1404	Darvin Schild	20180514-5461	GEN-10
IND-1405	Yanko Polanco	20180514-5462	GEN-10
IND-1406	Laura Aurilio	20180514-5463	GEN-10
IND-1407	Yvonne Adkins	20180514-5464	GEN-10
IND-1408	Laura Fox	20180514-5465	GEN-10
IND-1409	David Abalos	20180514-5466	GEN-10
IND-1410	Laura mcmullen	20180514-5467	GEN-10
IND-1411	David Miller	20180514-5468	GEN-10
IND-1412	Laurel Cameron	20180514-5469	GEN-10
IND-1413	Lee Barile	20180514-5470	GEN-10
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IND-1417	Lewis Johnson	20180514-5474	GEN-10
IND-1418	Lewis Smiler	20180514-5475	GEN-10
IND-1419	Dawn Hillman	20180514-5476	GEN-10
IND-1420	Linda Beauregard	20180514-5477	GEN-10
IND-1421	Dawn Stricoff	20180514-5478	GEN-10
IND-1422	Linda O'Donnell	20180514-5479	GEN-10
IND-1423	Linda Pingitore	20180514-5480	GEN-10
IND-1424	Lisa Lasalle	20180514-5481	GEN-10
IND-1425	Liz Reisman	20180514-5482	GEN-10
IND-1426	Louis Chorba	20180514-5483	GEN-10
IND-1427	Deborah Bianco	20180514-5484	GEN-10
IND-1428	Luis Cavallone	20180514-5485	GEN-10
IND-1429	Lynn Gale	20180514-5486	GEN-10
IND-1430	Debra Miller Miller	20180514-5487	GEN-10
IND-1431	Denise Lytle	20180514-5488	GEN-10
IND-1432	Dennis Huyler	20180514-5489	GEN-10
IND-1433	Derek Gendvil	20180514-5490	GEN-10
IND-1434	Dhruv Jagasia	20180514-5491	GEN-10
IND-1435	Diana Patton	20180514-5492	GEN-10
IND-1436	Diane Difante	20180514-5493	GEN-10
IND-1437	Donald Cirillo	20180514-5494	GEN-10
IND-1438	Donald Matyas	20180514-5495	GEN-10
IND-1439	Donald Reed	20180514-5496	GEN-10
IND-1440	Donald Widmyer	20180514-5497	GEN-10
IND-1441	Donna Ellis	20180514-5498	GEN-10
IND-1442	Patricia Santoro	20180514-5499	GEN-10
IND-1443	Linda Rossin	20180514-5500	GEN-10
IND-1444	Paul Adams	20180514-5502	GEN-10
IND-1445	Paul Russo	20180514-5503	GEN-10
IND-1446	Peter Herzer	20180514-5504	GEN-10

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IND-1447	Philip J. Hyun	20180514-5505	GEN-10
IND-1448	Phillip Pappano	20180514-5506	GEN-10
IND-1449	Phyllis Fast	20180514-5507	GEN-10
IND-1450	Randi Rothmel	20180514-5508	GEN-10
IND-1451	Renu Jagasia	20180514-5509	GEN-10
IND-1452	Rebecca Reynolds	20180514-5510	GEN-10
IND-1453	Renee Cantwell	20180514-5511	GEN-10
IND-1454	Richard Anscher	20180514-5512	GEN-10
IND-1455	Rivka Rachum	20180514-5513	GEN-10
IND-1456	Richard Staten	20180514-5514	GEN-10
IND-1457	Robert Findlay	20180514-5515	GEN-10
IND-1458	Richard Hennessy	20180514-5516	GEN-10
IND-1459	Robert Keller	20180514-5517	GEN-10
IND-1460	Richard Puglisi	20180514-5518	GEN-10
IND-1461	Robert Coffey	20180514-5519	GEN-10
IND-1462	Robert K	20180514-5521	GEN-10
IND-1463	Robert Kutch	20180514-5522	GEN-10
IND-1464	Robert Rudderow	20180514-5523	GEN-10
IND-1465	Robert Veralli	20180514-5524	GEN-10
IND-1466	Robert Wozniak	20180514-5526	GEN-10
IND-1467	Roberta Daly	20180514-5527	GEN-10
IND-1468	Roberto Romero	20180514-5528	GEN-10
IND-1469	Roger Dreyling	20180514-5529	GEN-10
IND-1470	Roger Johnson	20180514-5530	GEN-10
IND-1471	Ronnie Damario	20180514-5532	GEN-10
IND-1472	Ronald Capria	20180514-5533	GEN-10
IND-1473	Rosemarie Ceaser	20180514-5534	GEN-10
IND-1474	Rose Eckert	20180514-5536	GEN-10
IND-1475	Rosmary Mancuso	20180514-5537	GEN-10
IND-1476	Ruth Boice	20180514-5538	GEN-10
IND-1477	Donna Yavorsky	20180514-5539	GEN-10

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IND-1479	Douglas Schneller	20180514-5541	GEN-10
IND-1480	E. Neal	20180514-5542	GEN-10
IND-1481	Edward Lang	20180514-5543	GEN-10
IND-1482	Eleanor Buscher	20180514-5544	GEN-10
IND-1483	Ellen Crain	20180514-5545	GEN-10
IND-1484	Ellen Piascik	20180514-5548	GEN-10
IND-1485	Ellen Taylor	20180514-5551	GEN-10
IND-1486	Eric Santone	20180514-5553	GEN-10
IND-1487	Emily Hall	20180514-5555	GEN-10
IND-1488	Erik Hartten	20180514-5558	GEN-10
IND-1489	Erin Fucci	20180514-5560	GEN-10
IND-1490	Emily Nanneman	20180514-5561	GEN-10
IND-1491	Esther Barcun	20180514-5562	GEN-10
IND-1492	Eugene Wachspress	20180514-5563	GEN-10
IND-1493	Eugene Cahill	20180514-5565	GEN-10
IND-1494	Eric Rohmann	20180514-5567	GEN-10
IND-1495	Frances Recca	20180514-5569	GEN-10
IND-1496	George Hurst	20180514-5571	GEN-10
IND-1497	Frank A. Brincka	20180514-5573	GEN-10
IND-1498	Gerald Reisner	20180514-5574	GEN-10
IND-1499	Gloria Levitt	20180514-5576	GEN-10
IND-1500	Greta Rossi	20180514-5577	GEN-10
IND-1501	Frank Louvis	20180514-5578	GEN-10
IND-1502	Gwendolyn Kent	20180514-5580	GEN-10
IND-1503	Halie Hennessey	20180514-5581	GEN-10
IND-1504	Heather John	20180514-5582	GEN-10
IND-1505	Fred Fall	20180514-5583	GEN-10
IND-1506	Hector Maldonado	20180514-5585	GEN-10
IND-1507	Heidi Hess	20180514-5587	GEN-10
IND-1508	Gabriel Fisch	20180514-5588	GEN-10

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IND-1510	Colleen Loughran	20180514-5591	GEN-10
IND-1511	Gail Keiser	20180514-5592	GEN-10
IND-1512	Gary Salata	20180514-5593	GEN-10
IND-1513	Constance Deeks	20180514-5594	GEN-10
IND-1514	Dennis M. Goldstein	20180514-5595	GEN-10
IND-1515	Constance Otten	20180514-5596	GEN-10
IND-1516	George Abaunza	20180514-5597	GEN-10
IND-1517	Craig Morgan	20180514-5598	GEN-10
IND-1518	Dennis Spyckaboer	20180514-5599	GEN-10
IND-1519	Dr. Scott Whitener	20180514-5600	GEN-10
IND-1520	D C	20180514-5601	GEN-10
IND-1521	Damian Harris	20180514-5602	GEN-10
IND-1522	Charles Graver	20180514-5603	GEN-10
IND-1523	Dana Simone	20180514-5604	GEN-10
IND-1524	Daniel Stroh	20180514-5605	GEN-10
IND-1525	Charles Rinear	20180514-5606	GEN-10
IND-1526	Danielle Caro	20180514-5607	GEN-10
IND-1527	David A Lawrence	20180514-5608	GEN-10
IND-1528	Dawn Mulroney	20180514-5609	GEN-10
IND-1529	Deborah Irovando	20180514-5610	GEN-10
IND-1530	Cheryl Dzubak	20180514-5611	GEN-10
IND-1531	Denise Eberly	20180514-5612	GEN-10
IND-1532	Dennis Taggart	20180514-5613	GEN-10
IND-1533	Cheryl Forte	20180514-5614	GEN-10
IND-1534	Derek Bailey	20180514-5615	GEN-10
IND-1535	Diane Geary	20180514-5616	GEN-10
IND-1536	Christina Laudeman	20180514-5618	GEN-10
IND-1537	Diane Linker	20180514-5619	GEN-10
IND-1538	Dolores Varga	20180514-5620	GEN-10
IND-1539	David Briede	20180514-5621	GEN-10

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IND-1541	Emily Hall	20180514-5623	GEN-10
IND-1542	Evan Carlsen	20180514-5624	GEN-10
IND-1543	David Hubbard	20180514-5625	GEN-10
IND-1544	Fran Ransom	20180514-5626	GEN-10
IND-1545	Francine Varga	20180514-5627	GEN-10
IND-1546	David Muller	20180514-5628	GEN-10
IND-1547	Frank C Snope	20180514-5629	GEN-10
IND-1548	Frank Pellecchia	20180514-5630	GEN-10
IND-1549	Frank Pellegrino	20180514-5631	GEN-10
IND-1550	Gail Fazio	20180514-5632	GEN-10
IND-1551	David Pallotta	20180514-5633	GEN-10
IND-1552	Gary Salata	20180514-5634	GEN-10
IND-1553	George Palmer	20180514-5636	GEN-10
IND-1554	George Pizzio	20180514-5637	GEN-10
IND-1555	George R. Hill	20180514-5638	GEN-10
IND-1556	Donna Murphy	20180514-5639	GEN-10
IND-1557	Geraldine Daniel	20180514-5640	GEN-10
IND-1558	Helga Spector	20180514-5641	GEN-10
IND-1559	Elayna Kotsaftis	20180514-5642	GEN-10
IND-1560	Holly Greaver	20180514-5643	GEN-10
IND-1561	Holly McDonald	20180514-5644	GEN-10
IND-1562	Howard B. Hassman	20180514-5645	GEN-10
IND-1563	Elizabeth Bates	20180514-5646	GEN-10
IND-1564	Inga Robbins	20180514-5647	GEN-10
IND-1565	Is Molina	20180514-5648	GEN-10
IND-1566	J Gallagher	20180514-5649	GEN-10
IND-1567	Elizabeth Freeman	20180514-5650	GEN-10
IND-1568	Jack Kung	20180514-5651	GEN-10
IND-1569	Elizabeth Roedell	20180514-5652	GEN-10
IND-1570	James Elkin	20180514-5653	GEN-10

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IND-1572	Jane Dineen	20180514-5655	GEN-10
IND-1573	Elizabeth Seltzer Seltzer	20180514-5656	GEN-10
IND-1574	Janet Dietz	20180514-5657	GEN-10
IND-1575	Liz Friend	20180514-5658	GEN-10
IND-1576	Ellen Fink	20180514-5659	GEN-10
IND-1577	Ellen Gannon	20180514-5663	GEN-10
IND-1578	Gerry Masurat	20180514-5666	GEN-10
IND-1579	M Rossner	20180514-5667	GEN-10
IND-1580	Madhavi Vadhere	20180514-5668	GEN-10
IND-1581	Glen Derner	20180514-5669	GEN-10
IND-1582	Marc Rubin Rubin	20180514-5670	GEN-10
IND-1583	Marcia Minuskin	20180514-5671	GEN-10
IND-1584	Patricia Castine	20180514-5672	GEN-10
IND-1585	Marcia Steinberg	20180514-5673	GEN-10
IND-1586	Glenn Novak	20180514-5674	GEN-10
IND-1587	Donna Nina	20180514-5675	GEN-10
IND-1588	Margaret Duerr	20180514-5676	GEN-10
IND-1589	Doris Jackson	20180514-5677	GEN-10
IND-1590	Ruth Purr	20180514-5678	GEN-10
IND-1591	Gail Beard	20180514-5679	GEN-10
IND-1592	Glenn Turner	20180514-5680	GEN-10
IND-1593	Ruth Larkin	20180514-5681	GEN-10
IND-1594	Eileen O'Reilly	20180514-5683	GEN-10
IND-1595	Ruth H Varney	20180514-5684	GEN-10
IND-1596	Ruth Friedberg	20180514-5685	GEN-10
IND-1597	Glenn Welsh	20180514-5686	GEN-10
IND-1598	Marie Curtis	20180514-5687	GEN-10
IND-1599	Sara Diaz	20180514-5688	GEN-10
IND-1600	Graham Ellis	20180514-5689	GEN-10
IND-1601	Marie Leithauser	20180514-5690	GEN-10

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IND-1602	Sandra Kisielewski	20180514-5691	GEN-10
IND-1603	John Miktus	20180514-5692	GEN-10
IND-1604	Mark Van Rossen	20180514-5693	GEN-10
IND-1605	Laura Mirsky	20180514-5694	GEN-10
IND-1606	Sarah Shannon	20180514-5695	GEN-10
IND-1607	Lynn Uhrig	20180514-5697	GEN-10
IND-1608	Martha C. Akers	20180514-5698	GEN-10
IND-1609	Gregory Smith	20180514-5699	GEN-10
IND-1610	Lynn Glielmi	20180514-5700	GEN-10
IND-1611	Louis Discepola	20180514-5701	GEN-10
IND-1612	Sherry Taylor	20180514-5702	GEN-10
IND-1613	Joe Connelly	20180514-5703	GEN-10
IND-1614	Siegrid Berman	20180514-5704	GEN-10
IND-1615	Haley Drecksage	20180514-5705	GEN-10
IND-1616	Silvio Fittipaldi	20180514-5707	GEN-10
IND-1617	Martha Veselka	20180514-5708	GEN-10
IND-1618	Jay Rosin	20180514-5710	GEN-10
IND-1619	Harriet Grose	20180514-5711	GEN-10
IND-1620	Jay Hendra	20180514-5712	GEN-10
IND-1621	Jarrett Cloud	20180514-5713	GEN-10
IND-1622	Noah Simon	20180514-5714	GEN-10
IND-1623	Jean Kuhn	20180514-5715	GEN-10
IND-1624	Susan Babbitt	20180514-5716	GEN-10
IND-1625	Jean Citron	20180514-5717	GEN-10
IND-1626	Susan Farro	20180514-5718	GEN-10
IND-1627	Harry Hudson	20180514-5719	GEN-10
IND-1628	Susan Hanlon	20180514-5720	GEN-10
IND-1629	Mary Ann Fastook	20180514-5721	GEN-10
IND-1630	Susan Katz-Murphy	20180514-5722	GEN-10
IND-1631	Helen Lindsay	20180514-5723	GEN-10
IND-1632	Mary Ann Zagar	20180514-5724	GEN-10

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IND-1633	Mary Buda	20180514-5725	GEN-10
IND-1634	Lorraine Brabham	20180514-5726	GEN-10
IND-1635	Mary Levan	20180514-5727	GEN-10
IND-1636	Mary Lufen	20180514-5728	GEN-10
IND-1637	Mary Pelleccchia	20180514-5729	GEN-10
IND-1638	Louise Umberto	20180514-5730	GEN-10
IND-1639	Mary Sullivan	20180514-5731	GEN-10
IND-1640	Mary Tennison	20180514-5732	GEN-10
IND-1641	Lynn Ingemi	20180514-5733	GEN-10
IND-1642	Mary Tulloss	20180514-5734	GEN-10
IND-1643	Maryellen Devlin	20180514-5735	GEN-10
IND-1644	Matthew Franck	20180514-5736	GEN-10
IND-1645	Lynn Merle	20180514-5737	GEN-10
IND-1646	Maureen Knipp	20180514-5738	GEN-10
IND-1647	Maria Ambeel	20180514-5739	GEN-10
IND-1648	Saran Cunningham	20180514-5740	GEN-10
IND-1649	Markian Jaworsky	20180514-5741	GEN-10
IND-1650	Harry and Jill Brownfield	20180514-5742	GEN-10
IND-1651	Patricia Rolston	20180514-5743	GEN-10
IND-1652	Hilary Clayton	20180514-5744	GEN-10
IND-1653	James Barnshaw	20180514-5745	GEN-10
IND-1654	Shannon Jacobs	20180514-5746	GEN-10
IND-1655	James Walton	20180514-5747	GEN-10
IND-1656	Jan-Paul Alon	20180514-5748	GEN-10
IND-1657	Sheila Mazar	20180514-5749	GEN-10
IND-1658	Sherry Gordon	20180514-5750	GEN-10
IND-1659	Linda Milkes	20180514-5751	GEN-10
IND-1660	Sue Szambelak	20180514-5752	GEN-10
IND-1661	Sherry Minervino	20180514-5753	GEN-10
IND-1662	Melanie Murphy	20180514-5754	GEN-10
IND-1663	Merja Harju	20180514-5755	GEN-10

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IND-1665	Michael Dawson	20180514-5758	GEN-10
IND-1666	Stefanie Johnson	20180514-5759	GEN-10
IND-1667	Michael Doherty	20180514-5760	GEN-10
IND-1668	Michael Meehan	20180514-5761	GEN-10
IND-1669	Michele Remy	20180514-5762	GEN-10
IND-1670	Stephanie Helfgott	20180514-5763	GEN-10
IND-1671	Mike Costello	20180514-5764	GEN-10
IND-1672	Miriam MacGillis	20180514-5765	GEN-10
IND-1673	Monika Jelonnek	20180514-5766	GEN-10
IND-1674	Martina Clark	20180514-5767	GEN-10
IND-1675	Morgan Clark	20180514-5768	GEN-10
IND-1676	Myrna Fichtenbaum	20180514-5769	GEN-10
IND-1677	Nancy Cunningham	20180514-5770	GEN-10
IND-1678	Nancy Fiske	20180514-5772	GEN-10
IND-1679	Stephen Marshall	20180514-5773	GEN-10
IND-1680	Adele Blunnie	20180514-5774	GEN-10
IND-1681	Ann Babb	20180514-5775	GEN-10
IND-1682	Ann Sisko	20180514-5776	GEN-10
IND-1683	Caroline Kane	20180514-5777	GEN-10
IND-1684	Stephen Piotrowski	20180514-5778	GEN-10
IND-1685	Cb Michaels	20180514-5779	GEN-10
IND-1686	Ondina Ledo	20180514-5780	GEN-10
IND-1687	Charles Suozzo	20180514-5781	GEN-10
IND-1688	Christopher Carbone	20180514-5782	GEN-10
IND-1689	Steven Picerno	20180514-5783	GEN-10
IND-1690	Osvaldo Vagni D.D. Ph.D.	20180514-5784	GEN-10
IND-1691	Claudia Sabine	20180514-5785	GEN-10
IND-1692	D Purdue	20180514-5786	GEN-10
IND-1693	P J September	20180514-5787	GEN-10
IND-1694	Mary Allocco-Bickar	20180514-5788	GEN-10

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IND-1696	Daniel Jeffrey	20180514-5790	GEN-10
IND-1697	David Gambone	20180514-5791	GEN-10
IND-1698	Dennis Francy	20180514-5792	GEN-10
IND-1699	Stuart Way	20180514-5793	GEN-10
IND-1700	Antoinette Meale	20180514-5795	GEN-10
IND-1701	Nicholas Homyak	20180514-5796	GEN-10
IND-1702	Dennis Kreiner	20180514-5797	GEN-10
IND-1703	Bonnie Heh	20180514-5798	GEN-10
IND-1704	Caren Herzhauser	20180514-5799	GEN-10
IND-1705	Carl Pflug	20180514-5801	GEN-10
IND-1706	Dennis Schvejda	20180514-5802	GEN-10
IND-1707	Donna Serbe-Davis	20180514-5803	GEN-10
IND-1708	Patricia DeGutis	20180514-5804	GEN-10
IND-1709	Erin Pellecchia	20180514-5805	GEN-10
IND-1710	Joanne Grossi	20180514-5806	GEN-10
IND-1711	Diane Heyer	20180514-5807	GEN-10
IND-1712	John Burton	20180514-5808	GEN-10
IND-1713	Jeanne Brown	20180514-5809	GEN-10
IND-1714	Jeanne Golden	20180514-5810	GEN-10
IND-1715	Jeff Stolarz	20180514-5811	GEN-10
IND-1716	Patricia McCue	20180514-5812	GEN-10
IND-1717	Joan Gelber	20180514-5813	GEN-10
IND-1718	John Teevan	20180514-5814	GEN-10
IND-1719	Joseph Attamante	20180514-5815	GEN-10
IND-1720	Judy Serbinski	20180514-5816	GEN-10
IND-1721	Evan Dong	20180514-5817	GEN-10
IND-1722	Karen Berman	20180514-5818	GEN-10
IND-1723	Jill Arbuckle	20180514-5819	GEN-10
IND-1724	Jim Goudsward	20180514-5820	GEN-10
IND-1725	Jim Miller	20180514-5821	GEN-10

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IND-1727	Joan Bernstein	20180514-5823	GEN-10
IND-1728	Joan Cole	20180514-5824	GEN-10
IND-1729	Joanne Swope	20180514-5825	GEN-10
IND-1730	Joel Scharf	20180514-5826	GEN-10
IND-1731	John J. Collins	20180514-5827	GEN-10
IND-1732	John Pasqua	20180514-5828	GEN-10
IND-1733	John Ruhl	20180514-5829	GEN-10
IND-1734	John Wheeler	20180514-5830	GEN-10
IND-1735	Janice Buchalski	20180514-5831	GEN-10
IND-1736	Katherine Wearing	20180514-5833	GEN-10
IND-1737	Janie Horowitz	20180514-5835	GEN-10
IND-1738	Jean Garver	20180514-5836	GEN-10
IND-1739	Joseph Matar	20180514-5837	GEN-10
IND-1740	Jeff Charney	20180514-5838	GEN-10
IND-1741	Jennifer Kimble	20180514-5839	GEN-10
IND-1742	Laurie Genovese	20180514-5840	GEN-10
IND-1743	Josephine Emburgia	20180514-5841	GEN-10
IND-1744	Kathleen Zane	20180514-5842	GEN-10
IND-1745	Kathleen Comer	20180514-5843	GEN-10
IND-1746	L Isa Blume	20180514-5844	GEN-10
IND-1747	Kathleen Lingo	20180514-5845	GEN-10
IND-1748	Laurie Malsbury	20180514-5846	GEN-10
IND-1749	Leslie Boen	20180514-5847	GEN-10
IND-1750	L Ship	20180514-5848	GEN-10
IND-1751	Thomas DeAngelis	20180514-5849	GEN-10
IND-1752	Linda Elsenhans	20180514-5850	GEN-10
IND-1753	John Sgambati	20180514-5851	GEN-10
IND-1754	Lynn Mignola	20180514-5852	GEN-10
IND-1755	Lacey Williams	20180514-5853	GEN-10
IND-1756	Margaret Dematteo	20180514-5854	GEN-10

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IND-1758	Margaret Needham	20180514-5856	GEN-10
IND-1759	Valerie Salice	20180514-5857	GEN-10
IND-1760	Marian Bobyak	20180514-5858	GEN-10
IND-1761	Lascinda Goetschius	20180514-5859	GEN-10
IND-1762	Marilyn Eppolite	20180514-5860	GEN-10
IND-1763	Lisa Quartararo	20180514-5861	GEN-10
IND-1764	Marilyn Paurelsky	20180514-5862	GEN-10
IND-1765	Tracey Franchi	20180514-5863	GEN-10
IND-1766	Joyce Copleman	20180514-5864	GEN-10
IND-1767	William Dudley	20180514-5865	GEN-10
IND-1768	Mark Seidman	20180514-5866	GEN-10
IND-1769	Thomas Demarest	20180514-5867	GEN-10
IND-1770	Mary Ann Bentz	20180514-5868	GEN-10
IND-1771	Linos Frantzeskakis	20180514-5869	GEN-10
IND-1772	Kathleen Maher	20180514-5870	GEN-10
IND-1773	Joyce Galanter	20180514-5871	GEN-10
IND-1774	Walter Rothaug	20180514-5872	GEN-10
IND-1775	maureen muller	20180514-5873	GEN-10
IND-1776	Shawn Sori	20180514-5874	GEN-10
IND-1777	Judith Carlson	20180514-5875	GEN-10
IND-1778	Linda Wolf	20180514-5876	GEN-10
IND-1779	Richard Grant	20180514-5877	GEN-10
IND-1780	Michael Gatton	20180514-5878	GEN-10
IND-1781	Noelle McGuire	20180514-5879	GEN-10
IND-1782	Michele Fisk	20180514-5880	GEN-10
IND-1783	Mike Albar	20180514-5882	GEN-10
IND-1784	William Vachula	20180514-5883	GEN-10
IND-1785	Linda Williams	20180514-5884	GEN-10
IND-1786	Muammer Ekin	20180514-5885	GEN-10
IND-1787	Linda Blatnik	20180514-5886	GEN-10

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IND-1788	Nancy Carringer	20180514-5887	GEN-10
IND-1789	Nancy Chismar	20180514-5888	GEN-10
IND-1790	Violet Cominski	20180514-5889	GEN-10
IND-1791	Nancy Francy	20180514-5890	GEN-10
IND-1792	Susan Mullins	20180514-5891	GEN-10
IND-1793	Nancy Frisbie	20180514-5892	GEN-10
IND-1794	Styra Eisinger	20180514-5893	GEN-10
IND-1795	Linda Powell	20180514-5894	GEN-10
IND-1796	Judy Fairless	20180514-5895	GEN-10
IND-1797	Stephen Hirsch	20180514-5896	GEN-10
IND-1798	Patricia Di Domenico	20180514-5897	GEN-10
IND-1799	Sandra Polk	20180514-5898	GEN-10
IND-1800	Patricia Soteropoulos	20180514-5899	GEN-10
IND-1801	Julie Higgins	20180514-5901	GEN-10
IND-1802	Phyllis Truran	20180514-5902	GEN-10
IND-1803	Linda McKillip	20180514-5903	GEN-10
IND-1804	Phoebe Weseley	20180514-5904	GEN-10
IND-1805	Patrick Lenaghan	20180514-5905	GEN-10
IND-1806	Julia Barr	20180514-5906	GEN-10
IND-1807	Linda Mack	20180514-5907	GEN-10
IND-1808	Rev. Susan Joseph Rack	20180514-5908	GEN-10
IND-1809	June Bente	20180514-5909	GEN-10
IND-1810	Kathy Hart	20180514-5910	GEN-10
IND-1811	Tamara Scully	20180514-5911	GEN-10
IND-1812	Zoe Pron	20180514-5912	GEN-10
IND-1813	Kathleen Hennessy	20180514-5913	GEN-10
IND-1814	Kathi Thonet	20180514-5914	GEN-10
IND-1815	Katherine Herold	20180514-5915	GEN-10
IND-1816	Wendy Brophy	20180514-5916	GEN-10
IND-1817	Leslie Guillen	20180514-5917	GEN-10
IND-1818	Katharine Larocca	20180514-5918	GEN-10

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IND-1819	Stephen Carroll	20180514-5919	GEN-10
IND-1820	Karen Smith	20180514-5920	GEN-10
IND-1821	Ruth Steinberg	20180514-5921	GEN-10
IND-1822	Walter Tulys	20180514-5922	GEN-10
IND-1823	Rosemary Topar	20180514-5923	GEN-10
IND-1824	Karen Crisfulla	20180514-5924	GEN-10
IND-1825	Ronnie Cimprich	20180514-5925	GEN-10
IND-1826	K Suzanne Parsons	20180514-5926	GEN-10
IND-1827	Walter Teunisen	20180514-5927	GEN-10
IND-1828	Kevin Corcoran	20180514-5928	GEN-10
IND-1829	Susan Rivkind	20180514-5929	GEN-10
IND-1830	Susan Sheinfeld	20180514-5930	GEN-10
IND-1831	Virginia Murchison	20180514-5931	GEN-10
IND-1832	Teena Wildman Wildman	20180514-5932	GEN-10
IND-1833	Theresa Kozlow	20180514-5933	GEN-10
IND-1834	Thomas Hansen	20180514-5934	GEN-10
IND-1835	Laura Hill	20180514-5935	GEN-10
IND-1836	Thomas La Tourette	20180514-5936	GEN-10
IND-1837	Timothy Beitel	20180514-5937	GEN-10
IND-1838	Virginia Breza	20180514-5938	GEN-10
IND-1839	Todd Wolf	20180514-5940	GEN-10
IND-1840	Victoria Mack	20180514-5941	GEN-10
IND-1841	Kathe Palka	20180514-5971	GEN-10
IND-1842	Tom Manning	20180514-5974	GEN-10
IND-1843	John Bertolotti	20180514-5976	GEN-10
IND-1844	Celia Ackerman	20180514-5978	GEN-10
IND-1845	Jean Toler	20180514-5982	GEN-10
IND-1846	Cheri Stead	20180514-5984	GEN-10
IND-1847	Joseph Sutherland	20180514-5987	GEN-10
IND-1848	Sondra Crouch	20180514-5992	GEN-10
IND-1849	Patricia Soteropoulos	20180514-5993	GEN-10

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IND-1850	Jamie Charles	20180514-5996	GEN-10
IND-1851	Ann Tung	20180514-6004	GEN-10
IND-1852	Jane Weiss	20180514-6006	GEN-10
IND-1853	Allison Bolsius	20180514-6008	GEN-10
IND-1854	Steve Golin	20180514-6013	GEN-10
IND-1855	Dottie Robinson	20180514-6018	GEN-10
IND-1856	Diane Moser	20180514-6019	GEN-10
IND-1857	Kenn Kerr	20180514-6025	GEN-10
IND-1858	Stephanie Garofalo	20180514-6026	GEN-10
IND-1859	Thomas Cierech	20180514-6036	GEN-10
IND-1860	Scot Mooney	20180514-6038	GEN-10
IND-1861	Alice Golin	20180514-6056	GEN-10
IND-1862	Bill Young	20180514-6059	GEN-10
IND-1863	Patty Cronheim	20180514-6061	GEN-10
IND-1864	Tim Pearce	20180514-6062	GEN-10
IND-1865	Paul Williams	20180514-6063	GEN-10
IND-1866	Meredith Kates	20180514-6065	GEN-10
IND-1867	Linda Stork	20180514-6071	GEN-10
IND-1868	Mark Pezzati	20180514-6078	GEN-10
IND-1869	Robert More	20180514-6079	GEN-10
IND-1870	Margaret Woo	20180515-5125	GEN-10
IND-1871	Phyllis Kopec	20180515-5127	GEN-10
IND-1872	Thornton Long	20180515-5128	GEN-10
IND-1873	Christina Perella	20180514-5083	GEN-4
IND-1874	Jerry Lance	20180510-4004	GEN-9
IND-1875	Brittney Bibbs	20180510-4004	GEN-9
IND-1876	Lee M. Groman	20180510-4004	GEN-9
IND-1877	Roger Boulware II	20180510-4004	GEN-9
IND-1878	Daniel F. Creech	20180510-4004	GEN-9
IND-1879	Cameron Lovitt	20180510-4004	GEN-9
IND-1880	Donald Smith	20180510-4004	GEN-9

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IND-1881	Tyler Fraser	20180510-4004	GEN-9
IND-1882	Colt Grubbs	20180510-4004	GEN-9
IND-1883	Lane Darden	20180510-4004	GEN-9
IND-1884	John Mullens	20180510-4004	GEN-9
IND-1885	Trevor Sneed	20180510-4004	GEN-9
IND-1886	Marion Stueny	20180510-4004	GEN-9
IND-1887	Ryan Taylor Wiggins	20180510-4004	GEN-9
IND-1888	Brenda Leftwich	20180510-4004	GEN-9
IND-1889	Dakota Dalton	20180510-4004	GEN-9
IND-1890	Roy Leftwich	20180510-4004	GEN-9
IND-1891	Jawaan Williams	20180510-4004	GEN-9
IND-1892	Daniel Hockley	20180510-4004	GEN-9
IND-1893	Kevin Gregory	20180510-4004	GEN-9
IND-1894	Carmen Moody	20180510-4004	GEN-9
IND-1895	Melissa Buchanan	20180510-4004	GEN-9
IND-1896	Chris Fizer	20180510-4004	GEN-9
IND-1897	Jaramyah Shuman	20180510-4004	GEN-9
IND-1898	Michael Wingett	20180510-4004	GEN-9
IND-1899	JC Robinson	20180510-4004	GEN-9
IND-1900	Jayson B. Gates	20180510-4004	GEN-9
IND-1901	John Blalock	20180510-4004	GEN-9
IND-1902	Blake Hankins	20180510-4004	GEN-9
IND-1903	Jeffrey Framme	20180510-4004	GEN-9
IND-1904	Bobbie Minter	20180510-4004	GEN-9
IND-1905	Jerry M. Foster	20180510-4004	GEN-9
IND-1906	Michael Cooley	20180510-4004	GEN-9
IND-1907	Brandon Kropich	20180510-4004	GEN-9
IND-1908	John Jordan	20180510-4004	GEN-9
IND-1909	Edwin Thomas	20180510-4004	GEN-9
IND-1910	Logan Nave	20180510-4004	GEN-9
IND-1911	Barry Forrester	20180510-4004	GEN-9

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IND-1912	Samuel L. Evans	20180510-4004	GEN-9
IND-1913	Landon Lax	20180510-4004	GEN-9
IND-1914	Kenneth J. Letzkus	20180510-4004	GEN-9
IND-1915	Maria F. Diaz	20180510-4004	GEN-9
IND-1916	Allen Monic	20180510-4004	GEN-9
IND-1917	Luke Johnson	20180510-4004	GEN-9
IND-1918	Cody Nave	20180510-4004	GEN-9
IND-1919	Adam Wicklund	20180510-4004	GEN-9
IND-1920	Jake Hill	20180510-4004	GEN-9
IND-1921	Garrett Bergkamp	20180510-4004	GEN-9
IND-1922	Ray D. Martin	20180510-4004	GEN-9
IND-1923	James Gregory	20180510-4004	GEN-9
IND-1924	Frank C. Hankins	20180510-4004	GEN-9
IND-1925	Kevin Conway	20180510-4004	GEN-9
IND-1926	Kevin Davis	20180510-4004	GEN-9
IND-1927	Benjamin Joseph Folmar	20180510-4004	GEN-9
IND-1928	Jerry M. Griffith	20180510-4004	GEN-9
IND-1929	Anthony Peru	20180510-4004	GEN-9
IND-1930	Steven Shrader	20180510-4004	GEN-9
IND-1931	William Turner	20180510-4004	GEN-9
IND-1932	Landon Driver	20180510-4004	GEN-9
IND-1933	Ronnie Lansford	20180510-4004	GEN-9
IND-1934	Joseph Sparks	20180510-4004	GEN-9
IND-1935	Shandon L. Wright	20180510-4004	GEN-9
IND-1936	Jeff Sailors	20180510-4004	GEN-9
IND-1937	Michael Gentry	20180510-4004	GEN-9
IND-1938	Jonah McCulley	20180510-4004	GEN-9
IND-1939	Dustin Christopher	20180510-4004	GEN-9
IND-1940	Ryan Smith	20180510-4004	GEN-9
IND-1941	Brooke Divan	20180510-4004	GEN-9
IND-1942	Jason McLain	20180510-4004	GEN-9

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IND-1943	Jason McLain	20180510-4004	GEN-9
IND-1944	Gerald Taylor	20180510-4004	GEN-9
IND-1945	Delmer Hays	20180510-4004	GEN-9
IND-1946	Joe Torres	20180510-4004	GEN-9
IND-1947	David Dieringer	20180510-4004	GEN-9
IND-1948	Lorenzo Mireles	20180510-4004	GEN-9
IND-1949	Steven Julich	20180510-4004	GEN-9
IND-1950	Ryan Holcomb	20180510-4004	GEN-9
IND-1951	Peyton Fontenot	20180510-4004	GEN-9
IND-1952	Seth Jackson	20180510-4004	GEN-9
IND-1953	Jessie Steed	20180510-4004	GEN-9
IND-1954	Dylan Thomas	20180510-4004	GEN-9
IND-1955	Scott Youngren	20180510-4004	GEN-9
IND-1956	Andrew Crosson	20180510-4004	GEN-9
IND-1957	Edgardo Morando	20180510-4004	GEN-9
IND-1958	Vidal Morando	20180510-4004	GEN-9
IND-1959	Kyle Dyer	20180510-4004	GEN-9
IND-1960	Wade Bagwell	20180510-4004	GEN-9
IND-1961	Anthony Loggins	20180510-4004	GEN-9
IND-1962	Aaron Albright	20180510-4004	GEN-9
IND-1963	Justin Teague	20180510-4004	GEN-9
IND-1964	Isaac Dean Love	20180510-4004	GEN-9
IND-1965	Ross Moore	20180510-4004	GEN-9
IND-1966	Richard Hoopingarnu	20180510-4004	GEN-9
IND-1967	Tommy Drake	20180510-4004	GEN-9
IND-1968	Doyle Warren	20180510-4004	GEN-9
IND-1969	Calvin Swansey	20180510-4004	GEN-9
IND-1970	John Wood	20180510-4004	GEN-9
IND-1971	Kyle Baker	20180510-4004	GEN-9
IND-1972	Matt Martin	20180510-4004	GEN-9
IND-1973	Robert R. Brown	20180510-4004	GEN-9

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IND-1974	Pete Newmes	20180510-4004	GEN-9
IND-1975	Joe Mireles	20180510-4004	GEN-9
IND-1976	L. Lotut	20180510-4004	GEN-9
IND-1977	Chris Darren	20180510-4004	GEN-9
IND-1978	Jesse Cox	20180510-4004	GEN-9
IND-1979	Landon Carr	20180510-4004	GEN-9
IND-1980	Cory Vaught	20180510-4004	GEN-9
IND-1981	Michael Kempton	20180510-4004	GEN-9
IND-1982	Michael Ogilvie	20180510-4004	GEN-9
IND-1983	Kirk P. Pitre	20180510-4004	GEN-9
IND-1984	Tyler W. Garner	20180510-4004	GEN-9
IND-1985	Richard Hoopingarnu, Jr.	20180510-4004	GEN-9
IND-1986	Nick Bozza	20180510-4004	GEN-9
IND-1987	Jacob Hyder	20180510-4004	GEN-9
IND-1988	Tim Spire	20180510-4004	GEN-9
IND-1989	Steven Randall	20180510-4004	GEN-9
IND-1990	Austin Lair	20180510-4004	GEN-9
IND-1991	Jared Finley	20180510-4004	GEN-9
IND-1992	Tyler Sasse	20180510-4004	GEN-9
IND-1993	Barrett Arnold	20180510-4004	GEN-9
IND-1994	Thomas J. Shepstone	20180510-4004	GEN-9
IND-1995	Teresa Yannotta	20180611-0020	GEN-1, ALTS-4, SAFE-1, AIR-3, SOCIO-1
IND-1996	John Muth	20180612-5000, 20180613-5008	GEN-10
IND-1997	Carol Kuehn	20180612-5008	GEN-10, SAFE-4, AIR-5, AIR-4, ALTS-12, AQU-12, SAFE-11, AIR-6, GW-6, GEN-3, AIR-3, WILD-1, GW-5, SOCIO-13, AQU-19, AQU-9, CI-9, GEN-22, CI-12
IND-1998	Carol Kuehn	20180612-5009	GEN-29, GEN-10
IND-1999	Carol Kuehn	20180612-5010	SAFE-4
IND-2000	John Muth	20180613-5000, 20180613-5008	GEN-3, AIR-3, WILD-1, GW-5, SOCIO-13, AQU-19, AQU-9, CI-9, GEN-22, CI-12
IND-2001	Barbara Cuthbert	20180622-5137	GEN-33, GEN-26, GEN-33, GEN-10

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IND-2002	James A. Colquist	20180613-5020	AIR-4, SAFE-11
IND-2003	James A. Colquist	20180613-5021	GEN-29
IND-2004	Lori G. Colquist	20180613-5023	GW-1, AIR-2, AQU-1, GW-5, AIR-5
IND-2005	Lori G. Colquist	20180613-5024	GEN-10, GEN-29
IND-2006	James A. Colquist	20180613-5025	GEN-2
IND-2007	John Muth	20180613-5081, 20180613-5008	GEN-29, GEN-10
IND-2008	Carol Kuehn	20180613-5108	AIR-5
IND-2009	Carol Kuehn	20180613-5114	AIR-5
IND-2010	Carol Kuehn	20180613-5119	AIR-4
IND-2011	Carol Kuehn	20180613-5136	CI-9, CI-9, GEN-2, CI-12
IND-2012	Carol Kuehn	20180613-5137	GEN-3, AQU-1, AQU-20, SOCIO-13, AQU-9, AQU-1, AQU-12, AQU-23
IND-2013	Carol Kuehn	20180613-5138	GW-5
IND-2014	Carol Kuehn	20180613-5139	VEG-1
IND-2015	Carol Kuehn	20180613-5140	SOCIO-10, SOCIO-5, GEN-10, AQU-1, AQU-1, AQU-23, AQU-36, AQU-9, AQU-7, AQU-35, CI-9
IND-2016	Carol Kuehn	20180613-5142	SAFE-11
IND-2017	Carol Kuehn	20180613-5143	ALTS-12
IND-2018	Linda Glaebberman	20180614-5000	GEN-10, AIR-6, GW-5, AQU-1, SOCIO-13, VEG-1, AIR-5, SAFE-1, SAFE-11, GEN-2
IND-2019	Catherine M. Colquist	20180614-5001	GEN-29, GEN-10, SAFE-4, AIR-5, SAFE-11
IND-2020	John Muth	20180614-5002, 20180613-5008	GEN-10, SAFE-4, AIR-5, AIR-4, ALTS-12, AQU-12, SAFE-11, AIR-6, GW-6
IND-2021	John Muth	20180614-5054, 20180613-5008	SAFE-4
IND-2022	John Muth	20180615-5000, 20180613-5008	AIR-5
IND-2023	Robert Scardapane	20180615-5043	GEN-10
IND-2024	Robert Scardapane	20180615-5044	GEN-3, AIR-3, WILD-1, GW-5, SOCIO-13, AQU-19, AQU-9, CI-9, GEN-22, CI-12
IND-2025	Robert Scardapane	20180615-5045	GEN-29, GEN-10

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IND-2026	Robert Scardapane	20180615-5046	GEN-10, SAFE-4, AIR-5, AIR-4, ALTS-12, AQU-12, SAFE-11, AIR-6, GW-6
IND-2027	Robert Scardapane	20180615-5047	SAFE-4
IND-2028	Robert Scardapane	20180615-5048	AIR-5
IND-2029	Robert Scardapane	20180615-5049	AIR-5
IND-2030	Robert Scardapane	20180615-5050	AIR-4
IND-2031	Robert Scardapane	20180615-5051	AIR-4
IND-2032	Robert Scardapane	20180615-5052	SAFE-11
IND-2033	Robert Scardapane	20180615-5053	ALTS-12
IND-2034	Robert Scardapane	20180615-5055	AQU-23, AQU-36, AQU-9, AQU-7, AQU-35
IND-2035	Robert Scardapane	20180615-5056	VEG-1
IND-2036	Robert Scardapane	20180615-5057	GW-5
IND-2037	Robert Scardapane	20180615-5058	AQU-1, AQU-20, SOCIO-13
IND-2038	Robert Scardapane	20180615-5059	AQU-9, AQU-1
IND-2039	Robert Scardapane	20180615-5060	AQU-23
IND-2040	Robert Scardapane	20180615-5061	CI-9
IND-2041	Robert Scardapane	20180615-5062	GEN-2
IND-2042	Robert Scardapane	20180615-5063	CI-9, CI-12
IND-2043	John Muth	20180618-5000, 20180613-5008	AIR-5
IND-2044	John Muth	20180618-5001, 20180613-5008	AIR-4
IND-2045	John Muth	20180618-5002, 20180613-5008	AIR-4
IND-2046	John Muth	20180618-5003, 20180613-5008	SAFE-11
IND-2047	John Muth	20180618-5004, 20180613-5008	ALTS-12
IND-2048	Jackie Weisberg	20180619-0015	GEN-1, ALTS-4
IND-2049	Scott F. Linde	20180619-0016	GEN-9
IND-2050	John Muth	20180619-5004, 20180613-5008	SOCIO-10, SOCIO-5, GEN-10, AQU-1

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IND-2051	John Muth	20180619-5005, 20180613-5008	AQU-23, AQU-36, AQU-9, AQU-7, AQU-35
IND-2052	John Muth	20180620-5001, 20180613-5008	VEG-1
IND-2053	John Muth	20180620-5002, 20180613-5008	GW-5
IND-2054	John Muth	20180620-5041, 20180613-5008	GEN-3, AQU-1, AQU-20, SOCIO-13
IND-2055	John Muth	20180621-5000, 20180613-5008	AQU-9, AQU-1
IND-2056	John Muth	20180621-5001, 20180613-5008	AQU-23
IND-2057	Kirk Frost	20180621-5013	AIR-5
IND-2058	John Muth	20180622-5000, 20180613-5008	CI-9
IND-2059	John Muth	20180622-5001, 20180613-5008	GEN-2
IND-2060	John Muth	20180622-5002, 20180613-5008	CI-9, CI-12
IND-2061	Kirk Frost	20180622-5029	GEN-10
IND-2062	Kirk Frost	20180720-5062	CI-8, CI-3
IND-2063	Kirk Frost	20180724-5015	GEN-2
IND-2064	Marie D'Anna	20180514-5084	GEN-4
IND-2065	Jarrett Cloud	20180514-5085	GEN-4
IND-2066	Rebecca Rabinowitz	20180514-5086	GEN-4
IND-2067	Kathy Aprile	20180514-5087	GEN-4
IND-2068	Jack Gajda	20180514-5088	GEN-4
IND-2069	Fran Ransom	20180514-5089	GEN-4
IND-2070	Boris Kofman	20180514-5090	GEN-4
IND-2071	Kevin Cannon	20180514-5091	GEN-4
IND-2072	Marissa Weber	20180514-5092	GEN-4
IND-2073	Leland Montgomery	20180514-5093	GEN-4
IND-2074	E. Neal	20180514-5094	GEN-4

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IND-2075	Jacqueline Scully-Clark	20180514-5095	GEN-4
IND-2076	Moreira Rui	20180514-5096	GEN-4
IND-2077	Jamie Greer	20180514-5097	GEN-4
IND-2078	Judith Gilbert	20180514-5098	GEN-4
IND-2079	C Keating	20180514-5099	GEN-4
IND-2080	Marcia Sass	20180514-5100	GEN-4
IND-2081	Virginia Woods	20180514-5101	GEN-4
IND-2082	Jaszmene Smith	20180514-5102	GEN-4
IND-2083	Lascinda Goetschius	20180514-5103	GEN-4
IND-2084	Dorothy Jackson	20180514-5104	GEN-4
IND-2085	Angela Townley	20180514-5105	GEN-4
IND-2086	Guy Harris	20180514-5106	GEN-4
IND-2087	Chandradat Ramjattan	20180514-5107	GEN-4
IND-2088	Dr. Michael Gonzalez	20180514-5108	GEN-4
IND-2089	Rosa Cherry	20180514-5109	GEN-4
IND-2090	Aniko Somogyi	20180514-5110	GEN-4
IND-2091	Joan Odud	20180514-5111	GEN-4
IND-2092	Laurie Kayne	20180514-5112	GEN-4
IND-2093	Judith Foys	20180514-5113	GEN-4
IND-2094	Kim Sellon	20180514-5114	GEN-4
IND-2095	George V. Hill, Jr	20180514-5115	GEN-4
IND-2096	L. Helaudais	20180514-5116	GEN-4
IND-2097	Sally Manning	20180514-5117	GEN-4
IND-2098	Joyce Kalison	20180514-5118	GEN-4
IND-2099	Janys Kuznier	20180514-5119	GEN-4
IND-2100	Kim Kelly	20180514-5120	GEN-4
IND-2101	Renee Simone-Wiley	20180514-5121	GEN-4
IND-2102	Heather Kourpas	20180514-5122	GEN-4
IND-2103	Lyndsey Reynolds	20180514-5123	GEN-4
IND-2104	Patrick Riley	20180514-5124	GEN-4
IND-2105	Rosemarie Ceaser	20180514-5125	GEN-4

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IND-2106	Pamela Willia	20180514-5126	GEN-4
IND-2107	Tracy McLarnon	20180514-5127	GEN-4
IND-2108	Karen Judd	20180514-5128	GEN-4
IND-2109	Jay Hendra	20180514-5129	GEN-4
IND-2110	Marylin Wechselblatt	20180514-5130	GEN-4
IND-2111	Maria Ambeel	20180514-5131	GEN-4
IND-2112	Bernadette Gillick	20180514-5132	GEN-4
IND-2113	Lorraine Chevere	20180514-5133	GEN-4
IND-2114	Glenn Welsh	20180514-5134	GEN-4
IND-2115	Shawn Liddick	20180514-5135	GEN-4
IND-2116	Edward Sproull	20180514-5136	GEN-4
IND-2117	LeslieJenkins	20180514-5137	GEN-4
IND-2118	Cindy K	20180514-5138	GEN-4
IND-2119	Kenneth W Johnson	20180514-5139	GEN-4
IND-2120	Fritz Schwager	20180514-5140	GEN-4
IND-2121	Dr. Barbara Cuthbert	20180514-5141	GEN-4
IND-2122	Morgan Clark	20180514-5142	GEN-4
IND-2123	Julie von Uffel	20180514-5143	GEN-4
IND-2124	Melinda	20180514-5144	GEN-4
IND-2125	Al Good	20180514-5145	GEN-4
IND-2126	Cori Bishop	20180514-5146	GEN-4
IND-2127	Debra Miller	20180514-5147	GEN-4
IND-2128	Steve Troyanovich	20180514-5148	GEN-4
IND-2129	Kevin Teeple	20180514-5149	GEN-4
IND-2130	Tracy Foster	20180514-5150	GEN-4
IND-2131	Rosemary Volage	20180514-5151	GEN-4
IND-2132	G. Y.	20180514-5152	GEN-4
IND-2133	Leigh Bugbee	20180514-5153	GEN-4
IND-2134	Cheri Dzubak	20180514-5154	GEN-4
IND-2135	Jerome Zornesky	20180514-5155	GEN-4
IND-2136	Joyce Copleman	20180514-5157	GEN-4

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IND-2137	Form letter with 50 names attached.	20180514-5159	GEN-4
IND-2138	Form letter with 47 names attached.	20180514-5160	GEN-4
IND-2139	Form letter with 49 names attached.	20180514-5161	GEN-4
IND-2140	Form letter with 51 names attached.	20180514-5162	GEN-4
IND-2141	Form letter with 50 names attached.	20180514-5163	GEN-4
IND-2142	Form letter with 48 names attached.	20180514-5164	GEN-4
IND-2143	Form letter with 50 names attached.	20180514-5165	GEN-4
IND-2144	Form letter with 50 names attached.	20180514-5167	GEN-4
IND-2145	Form letter with 50 names attached.	20180514-5169	GEN-4
IND-2146	Form letter with 55 names attached.	20180514-5172	GEN-4
IND-2147	Form letter with 43 names attached.	20180514-5173	GEN-4
IND-2148	Form letter with 41 names attached.	20180514-5174	GEN-4
IND-2149	Form letter with 48 names attached.	20180514-5175	GEN-4
IND-2150	Form letter with 56 names attached.	20180514-6181	GEN-4
IND-2151	Form letter with 61 names attached.	20180515-5001	GEN-4
IND-2152	Form letter with 59 names attached.	20180515-5002	GEN-4
IND-2153	Form letter with 61 names attached.	20180515-5003	GEN-4
IND-2154	Form letter with 59 names attached.	20180515-5005	GEN-4
IND-2155	Form letter with 60 names attached.	20180515-5007	GEN-4
IND-2156	Form letter with 29 names attached.	20180515-5008	GEN-4
IND-2157	Form letter with 53 names attached.	20180515-5011	GEN-4
IND-2158	Form letter with 49 names attached.	20180515-5012	GEN-4
IND-2159	Form letter with 50 names attached.	20180515-5013	GEN-4
IND-2160	Form letter with 24 names attached.	20180515-5014	GEN-4
IND-2161	Barbara Cuthbert	20180817-5025	GEN-10, GEN-2, GEN-8, AIR-14, GW-6, SAFE-4, AIR-4
IND-2162	Kirk Frost	20180830-5069	GEN-10
IND-2163	Tanja Paris	20180921-5019	AIR-4, GEN-10
IND-2164	Barbara Cuthbert	20181001-5031	SAFE-4, SAFE-10, SAFE-8, SAFE-11
IND-2165	Tim Bennett	20181002-5003	GCD-1
IND-2166	Stephen G. Young	20181003-5000	GCD-2, GCD-3
IND-2167	Joseph T. Wilson, III	20181003-5001	GEN-9

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IND-2168	Jill Levey and Richard Powlen	20181018-0007	GEN-1
IND-2169	Donald J. Rajoppi	20181019-0012	GEN-9
IND-2170	Dionne Polk	20181019-5000	GEN-1, GEN-22
IND-2171	Angela P. McGlynn	20181022-5001	GEN-10, GEN-29
IND-2172	Valerie Buckner	20181023-0029	GCD-13
IND-2173	Dr. Barbara Cuthbert	20181025-5092	SAFE-4, SAFE-10, SAFE-8, SAFE-11
IND-2174	Barbara Cuthbert	20181127-5041	T&E-17
IND-2175	Robert Wood	20181129-5199	T&E-17
IND-2176	Sara S. Gronim	20181129-5231	T&E-17
IND-2177	Kirk Frost	20181213-5036	AIR-5, AIR-6, CI-3
IND-2178	Drew E. Cuthbert	20181214-5027	GCD-51
IND-2179	Dr. Barbara Cuthbert	20181214-5251	GEN-10, GEN-29, GEN-2, CI-9, AIR-18, AIR-4

Public Comment SessionsPCS-1: Old Bridge, New Jersey

PCS-1	Kevin Lynn	20180425-4003	GEN-9
PCS-1	Kathleen McNamara	20180425-4003	AQU-9, AQU-1, SAFE-1, LU-4
PCS-1	Jamie Zaccaria, New Jersey Sierra Club	20180425-4003	GEN-26, SAFE-1, GEN-2, AIR-2, CI-9
PCS-1	Gary Frederick, Sierra Club	20180425-4003	GEN-10, GEN-3, AQU-9, AQU-23
PCS-1	Christopher Bohlke	20180425-4003	GEN-9
PCS-1	Barbara Brucker	20180425-4003	GEN-6, GEN-26
PCS-1	Michael Corcoran	20180425-4003	GEN-9
PCS-1	Fred Potter	20180425-4003	GEN-9
PCS-1	Vince Bonanne	20180425-4003	GEN-9
PCS-1	Ronnie Traktman	20180425-4003	SAFE-8, SAFE-1, GEN-2
PCS-1	Dominic Christiana	20180425-4003	GEN-9
PCS-1	Sindhu Pasricha	20180425-4003	GEN-27, SAFE-4, SOCIO-10, AIR-5
PCS-1	Bernadette Maher	20180425-4003	AIR-2, AQU-1, AQU-32, GEN-2
PCS-1	Jason Vanscoten	20180425-4003	GEN-9
PCS-1	Joseph Morgan	20180425-4003	GEN-9
PCS-1	Andrew Holland	20180425-4003	GEN-9

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PCS-1	Cornelius Springvloed	20180425-4003	GEN-9
PCS-1	Curtiss Wells	20180425-4003	GEN-9
PCS-1	Ciro Scalera	20180425-4003	GEN-9
PCS-1	Felice Morello	20180425-4003	GEN-9
PCS-1	Dennis Lukach	20180425-4003	AQU-1, GEN-3, SAFE-1, AQU-32, AIR-2, SOCIO-1, SAFE-23, GEN-2, ALTS-4, AQU-1
PCS-1	Michael Stiles	20180425-4003	GEN-9
PCS-1	William Schultz	20180425-4003	SAFE-1, SAFE-19, SOCIO-12, CI-3
PCS-1	Edina Brown, Councilwoman, Old Bridge (Ward 3)	20180425-4003	GEN-26, GEN-27, SAFE-1, AIR-5
PCS-1	Thomas J. O'Donnell	20180425-4003	GEN-9
PCS-1	Eric Pene	20180425-4003	GEN-9
PCS-1	Fred Potter	20180425-4003	GEN-9
PCS-1	Jacob Barrett	20180425-4003	GEN-9
PCS-1	Jim Ream, Sr.	20180425-4003	GEN-9
PCS-1	Carmine Caruso	20180425-4003	GEN-9
PCS-1	Kevin Corcoran	20180425-4003	SAFE-11, GW-5, GW-6, SAFE-5, SAFE-1, SAFE-3
PCS-1	Sean Flynn	20180425-4003	GEN-9
PCS-1	Patty Kronheim	20180425-4003	GEN-26, GEN-10, SAFE-4, SAFE-9, CI-4
PCS-1	Alfonso Vasquez	20180425-4003	GEN-9
PCS-1	Carol Kuehn	20180425-4003	SOCIO-10, SOCIO-12, AQU-1, AQU-19, AQU-23, LU-12
PCS-1	Linda Powell	20180425-4003	GEN-10, SAFE-10, LU-4, GEN-10
PCS-1	Elizabeth Roedell	20180425-4003	GEN-10, WILD-4, AQU-23, WILD-1
PCS-1	Daniel Ortega	20180425-4003	GEN-9
PCS-1	Michael Siano	20180425-4003	GEN-9
PCS-1	Robert White	20180425-4003	GEN-9
PCS-1	Barbara Cuthbert	20180425-4003	GEN-10, SAFE-10, GEN-22, SAFE-1
<u>PCS-2: Brooklyn, New York</u>			
PCS-2	Catherine Skopic	20180426-4002	ALTS-4
PCS-2	Elliott Skipp Roseboro	20180426-4002	GEN-26, GEN-2
PCS-2	Zachary Pace	20180426-4002	GEN-1, SAFE-10, ALTS-2
PCS-2	Justin Pascone	20180426-4002	GEN-9

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PCS-2	Barbara Dolan	20180426-4002	AQU-1
PCS-2	Joan Flynn	20180426-4002	SAFE-10
PCS-2	James Leonzio	20180426-4002	SAFE-10, AQU-1, AQU-9, SOCIO-12, AQU-19
PCS-2	Clare Hilger	20180426-4002	SAFE-10, AQU-9, AQU-1, AQU-1, GEN-2
PCS-2	Kimberly Hauer	20180426-4002	GEN-6, AQU-1, GEN-3, ALTS-4
PCS-2	Danny Ruscillo and Linda Ruscillo	20180426-4002	GEN-3, SAFE-10, SAFE-21
PCS-2	Judith Canepa	20180426-4002	AQU-1
PCS-2	Jhena Vigrass	20180426-4002	CI-9, SURF-5
PCS-2	Margarita Estevez	20180426-4002	CI-9
PCS-2	Edward Power	20180426-4002	GEN-3, AQU-9, AQU-23, SAFE-10, CI-9, GEN-26
PCS-2	Riitta Ikonen	20180426-4002	GEN-26, GEN-1, GEN-43, CI-9
PCS-2	Paul Flansburg	20180426-4002	CI-9, GEN-26
PCS-2	Patrick Houston	20180426-4002	AQU-1, CI-9, GEN-26
PCS-2	Jackie Weisberg	20180426-4002	GEN-26, CI-9, CI-12, GEN-2
PCS-2	Thomas Wendol	20180426-4002	GEN-26, GEN-1
PCS-2	Lyel Resner	20180426-4002	GEN-26, SAFE-10, GEN-10
PCS-2	Annie Garneva	20180426-4002	AQU-1, AQU-9
PCS-2	Susan Wilcox, Sister of St. Joseph of Brentwood, New York	20180426-4002	GEN-1
PCS-2	Carol Kelly	20180426-4002	CI-9, SAFE-10
PCS-2	Barbara Hertel	20180426-4002	SAFE-10, AQU-1, GEN-2, GEN-26
PCS-2	Joanne Boger	20180426-4002	SAFE-10, AQU-1, AQU-19, GEN-2, GEN-26
PCS-2	Christina Simanca-Proctor	20180426-4002	GEN-26, AQU-1, AQU-29, GEN-1
PCS-2	James Hannigan	20180426-4002	GEN-1, CI-9
PCS-2	Alex Beauchamp	20180426-4002	CI-9, GEN-26, CI-9
PCS-2	Eric Wagner	20180426-4002	GEN-1
PCS-2	James Boyman	20180426-4002	SAFE-17, AQU-1, AQU-9, CI-9
PCS-2	Eva Welchman	20180426-4002	ALTS-4, SAFE-1, AQU-9
PCS-2	Eugene Falik	20180426-4002	GEN-2, SAFE-10, SAFE-1, GEN-3
PCS-2	Kathleen Walker	20180426-4002	GEN-26, CI-9
PCS-2	Raphael Wakefield	20180426-4002	GEN-43, CI-9, CI-12

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PCS-2	George Elliot	20180426-4002	GEN-2, SAFE-10, CI-12, GEN-26
PCS-2	Ian Kinniburgh	20180426-4002	CI-9, ALTS-4
PCS-2	Lee Ziesche	20180426-4002	CI-9, SAFE-21, CI-9, AQU-1, GEN-26
PCS-2	Jack DePalma	20180426-4002	GEN-1, SAFE-1, CI-9, GEN-2
PCS-2	Damien James Greene-Ayala	20180426-4002	GEN-3, AQU-1
PCS-2	Cara Cannella	20180426-4002	SOCIO-10
PCS-2	Bridgette Klapinski	20180426-4002	GEN-10, AQU-19, AQU-1
PCS-2	Shanna Estevez	20180426-4002	GEN-1, SAFE-10, GEN-10, AQU-1
PCS-2	Laura Shindell	20180426-4002	CI-9, CI-12, GEN-43
PCS-2	Edith Kantrowitz	20180426-4002	CI-9, ALTS-4, GEN-2, SAFE-10, AQU-1
PCS-2	Dr. Marian Ronan	20180426-4002	SAFE-10, AQU-1
PCS-2	Eric Wilson	20180426-4002	CI-12, GEN-43
PCS-2	Robert Wood	20180426-4002	CI-12, GEN-2
PCS-2	Matthew Gove	20180426-4002	GEN-10, GEN-26, CI-9, GEN-2
PCS-2	Paula Speer	20180426-4002	SAFE-10, GEN-2, GEN-6, GEN-25
PCS-2	Jill Lauri	20180426-4002	SAFE-10, GEN-2, GEN-1
PCS-2	Jeremy Jones	20180426-4002	GEN-1
PCS-2	William Christopher	20180426-4002	GEN-10, CI-9, CI-12, GEN-43
PCS-2	Thomas Ross	20180426-4002	CI-12
PCS-2	Mimi Bluestone	20180426-4002	GEN-1, GEN-2, AQU-1, SAFE-10, SOCIO-6, CI-9, GEN-26
PCS-2	Bernice Gordon	20180426-4002	GEN-26, CI-9, SOCIO-9, GEN-10
PCS-2	Kim Fraczek	20180426-4002	GEN-3, GEN-2, GEN-26
PCS-2	Daniel Karpen	20180426-4002	ALTS-4
PCS-2	Elisa Dorn	20180426-4002	AQU-1
PCS-2	Alvaro Alcocer	20180426-4002	GEN-26, AQU-1
PCS-2	Elizabeth DiCesare	20180426-4002	GEN-2
PCS-2	Catherine Nieves	20180426-4002	GEN-1
PCS-2	Lisa Gallaudet	20180426-4002	GEN-26, GEN-26, GEN-1, GEN-2, SAFE-10
PCS-2	Sommyr Nate Pochan	20180426-4002	SAFE-15, SOCIO-10, AQU-2, GEN-2
PCS-2	Nikita Scott	20180426-4002	SAFE-10, SAFE-23, GEN-22, SAFE-15, AQU-1, GEN-3
PCS-2	Noelle Picone	20180426-4002	SAFE-10, CI-12, GEN-25, GEN-10, GEN-26

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PCS-2	Thomas Gilligan	20180426-4002	GEN-1
PCS-2	Nidhi Khanna	20180426-4002	SAFE-21, CI-9
PCS-2	Karen Gargamelli McCreight	20180426-4002	GEN-1, GEN-2, SAFE-1, GEN-6, GEN-26
PCS-2	Ross Cauvel	20180426-4002	CI-9
PCS-2	Wendy Fried	20180426-4002	GEN-10
PCS-2	Richard Porta	20180426-4002	GEN-1, GEN-26
PCS-2	Alexandra Hodkowski	20180426-4002	AQU-1, AQU-9
PCS-2	Martin Locante	20180426-4002	GEN-1
PCS-2	Anne Bassen	20180426-4002	GEN-26, GEN-1, SAFE-10, CI-9
PCS-2	Adriana Estrada	20180426-4002	GEN-3, GEN-10
PCS-2	Amber Ruther	20180426-4002	GEN-1
PCS-2	John Cori	20180426-4002	GEN-1, GEN-2
PCS-2	Sara Gronim	20180426-4002	CI-9, GEN-2
PCS-2	Wesley Higgins	20180426-4002	CI-12, CI-9, ALTS-4
PCS-2	Gabrielle Engh	20180426-4002	AQU-9, GEN-26
PCS-2	Alexandra Zevin	20180426-4002	CI-9, CI-12, GEN-43
<u>PCS-3: Somerset, New Jersey</u>			
PCS-3	Thomas J. O'Donnell,	20180502-4014, 20180613-4001	GEN-9
PCS-3	Carmine Caruso	20180502-4014, 20180613-4001	GEN-9
PCS-3	Daniel Egan	20180502-4014, 20180613-4001	GEN-9
PCS-3	Robert Laumbach	20180502-4014, 20180613-4001	AIR-3, AIR-5, CI-2
PCS-3	Nancy Gale	20180502-4014, 20180613-4001	GEN-1, GEN-2, SAFE-11, SAFE-4, AIR-3, GW-5, GEN-10, AIR-4
PCS-3	Sid Madison	20180502-4014, 20180613-4001	GEN-1
PCS-3	Robert Foster	20180502-4014, 20180613-4001	GEN-9
PCS-3	Rob Severini	20180502-4014, 20180613-4001	GEN-9

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PCS-3	Mark Davis, Jr.	20180502-4014, 20180613-4001	GEN-9
PCS-3	Christian Hartman	20180502-4014, 20180613-4001	GEN-9
PCS-3	Phyllis Beals	20180502-4014, 20180613-4001	GEN-10, AIR-4, AQU-3, GEN-10, SAFE-11
PCS-3	Jeremy Pollack	20180502-4014, 20180613-4001	NOISE-3, SAFE-11, SAFE-16, GW-6
PCS-3	Frank Zotti	20180502-4014, 20180613-4001	GEN-9
PCS-3	Robert Michael Beals	20180502-4014, 20180613-4001	GEN-10, GEN-2
PCS-3	Rajiv Prasad	20180502-4014, 20180613-4001	GEN-10
PCS-3	Eric J. Henderson	20180502-4014, 20180613-4001	AIR-3, SAFE-11, SAFE-4, ALTS-12
PCS-3	Theresa Maturo	20180502-4014, 20180613-4001	GEN-2, SAFE-11, NOISE-4
PCS-3	Ayesha Mughal	20180502-4014, 20180613-4001	SAFE-8, SAFE-10
PCS-3	Robert Scardapane	20180502-4014, 20180613-4001	GEN-10, AIR-5, AIR-4, SAFE-11, SAFE-4, GW-6
PCS-3	Jane McCarty	20180502-4014, 20180613-4001	SAFE-4, SAFE-10, AIR-5, SAFE-11, CI-7, GW-5, GEN-10
PCS-3	Regina Maher	20180502-4014, 20180613-4001	GW-6, SAFE-11, SAFE-1, GEN-1, CI-9
PCS-3	Tamar Kieval Brill	20180502-4014, 20180613-4001	SAFE-1, GEN-10, AIR-5, AIR-3, GEN-10
PCS-3	Gregory Cyr	20180502-4014, 20180613-4001	GEN-9
PCS-3	Julie Higgins	20180502-4014, 20180613-4001	GEN-1

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PCS-3	Pranav Bhatt	20180502-4014, 20180613-4001	AIR-18, AIR-3, SAFE-17, SAFE-1, SAFE-11, SAFE-4, GW-6, SAFE-16
PCS-3	Kirk Frost	20180502-4014, 20180613-4001	GEN-1, AQU-12, SOCIO-13
PCS-3	Richard Lipman	20180502-4014, 20180613-4001	GEN-10, SAFE-11, AIR-5, AIR-17
PCS-3	Judith Malin	20180502-4014, 20180613-4001	AIR-3, GEN-3
PCS-3	Justin Jaucian	20180502-4014, 20180613-4001	GEN-10, SAFE-1, AIR-3
PCS-3	Wayne Martiak	20180502-4014, 20180613-4001	GEN-9
PCS-3	Michael McLaughlin	20180502-4014, 20180613-4001	GEN-9
PCS-3	Warren Smith	20180502-4014, 20180613-4001	GEN-9
PCS-3	Anthony R. Gaylord	20180502-4014, 20180613-4001	GW-5, SAFE-11, AQU-1
PCS-3	Lavonne Heydel	20180502-4014, 20180613-4001	GEN-1
PCS-3	Kevin Moore	20180502-4014, 20180613-4001	AIR-5, CI-9, AIR-3, GEN-1, ALTS-4, GEN-10
PCS-3	Diane Heyer	20180502-4014, 20180613-4001	GEN-1, SOCIO-1, AIR-3, SAFE-1, CI-9, GEN-10
PCS-3	Gabriel Spiler	20180502-4014, 20180613-4001	AIR-5, GEN-1, SAFE-15, AIR-17, CI-9, AIR-3
PCS-3	Randolph Brolo	20180502-4014, 20180613-4001	GEN-9
PCS-3	David Zack	20180502-4014, 20180613-4001	GEN-9
PCS-3	Christopher Bohlke	20180502-4014, 20180613-4001	GEN-9

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PCS-3	Bob Spirito	20180502-4014, 20180613-4001	GEN-9
PCS-3	Barbara Cuthbert	20180502-4014, 20180613-4001	LU-4, SAFE-8, SAFE-11, SAFE-4, GEN-22, GEN-10, AQU-12, WILD-12
PCS-3	Pradip Chakravarti	20180502-4014, 20180613-4001	AIR-4, SAFE-1, SAFE-11, SAFE-4, SAFE-10
PCS-3	Manijeh Saba	20180502-4014, 20180613-4001	AIR-5, AIR-5, SAFE-8, AQU-9, NOISE-1, GEN-2, GEN-1
PCS-3	Theodore Chase	20180502-4014, 20180613-4001	SAFE-10, SAFE-1, ALTS-17
PCS-3	Kathryn J. Riss	20180502-4014, 20180613-4001	CI-9, GEN-10, AIR-4, SAFE-11, GW-6, SAFE-10
PCS-3	Mike Smith	20180502-4014, 20180613-4001	GEN-9
PCS-3	Lino Santiago	20180502-4014, 20180613-4001	GEN-9
PCS-3	Rod Brady	20180502-4014, 20180613-4001	SAFE-1, SAFE-10
PCS-3	Michael Bell	20180502-4014, 20180613-4001	AIR-5, SAFE-4, SAFE-1
PCS-3	Michael Jacowsky	20180502-4014, 20180613-4001	SAFE-11, GW-5, AIR-5, SAFE-16, LU-13, SAFE-1
PCS-3	Carol Kuehn	20180502-4014, 20180613-4001	AIR-4, AIR-5, SAFE-11, GW-6, SAFE-1, SAFE-4, WILD-12, CI-7, LU-7
PCS-3	Ron Palmquist	20180502-4014, 20180613-4001	GW-6, NOISE-1, AIR-3
PCS-3	Janaksinh Jadeja	20180502-4014, 20180613-4001	SAFE-1, AIR-3, LU-7, SAFE-4
PCS-3	Claire Mulry	20180502-4014, 20180613-4001	AIR-3, GEN-1
PCS-3	Dana Balsamo	20180502-4014, 20180613-4001	SAFE-8, SAFE-10, SAFE-11, GEN-10, GEN-1
PCS-3	Maureen Taylor	20180502-4014, 20180613-4001	GEN-10, AIR-3, SAFE-11, GW-5, SOCIO-1

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PCS-3	Wesley Morris	20180502-4014, 20180613-4001	GEN-10, GW-6, SAFE-15, AIR-5, SURF-2
PCS-3	Jill Morris	20180502-4014, 20180613-4001	GEN-1, GW-6, SURF-2, AIR-3, SAFE-11
PCS-3	Valsan Vellaladh	20180502-4014, 20180613-4001	AIR-3, AIR-4, SAFE-1, GEN-10
PCS-3	Anthony Howarth	20180502-4014, 20180613-4001	GEN-1
PCS-3	Siddika Pasi	20180502-4014, 20180613-4001	SAFE-1, SAFE-11, GW-5, ALTS-12, GEN-1, GEN-2
PCS-3	Seth Malin	20180502-4014, 20180613-4001	AIR-3, AQU-9, GEN-2
PCS-3	Jennifer Tobin	20180502-4014, 20180613-4001	AIR-3, NOISE-4, SAFE-11, SAFE-1, VEG-1
PCS-3	Sriram Garimalla	20180502-4014, 20180613-4001	GEN-1
PCS-3	Roger Ellis	20180502-4014, 20180613-4001	GEN-9
PCS-3	Fred Potter	20180502-4014, 20180613-4001	GEN-9
PCS-3	Harriet Warner	20180502-4014, 20180613-4001	SAFE-1, GEN-10, AIR-5, GEN-2
PCS-3	Robert Weissman	20180502-4014, 20180613-4001	AIR-3, SAFE-10, GEN-1, GEN-12, SAFE-16
PCS-3	Weislaw Gandukski	20180502-4014, 20180613-4001	GEN-9
PCS-3	Gregory Bing	20180502-4014, 20180613-4001	SAFE-1, ALTS-4, CI-9
PCS-3	Cheryl Bethea	20180502-4014, 20180613-4001	GEN-2, GEN-1, GEN-10, AIR-3
PCS-3	Tony Salernitano	20180502-4014, 20180613-4001	GEN-9
PCS-3	John Burnett	20180502-4014, 20180613-4001	GEN-9

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PCS-3	Charles Moirano	20180502-4014, 20180613-4001	GEN-10, AIR-3, SAFE-4, SAFE-16, GW-6, AIR-4
PCS-3	Dominic Christiana	20180502-4014, 20180613-4001	GEN-9
PCS-3	Michael Corcoran	20180502-4014, 20180613-4001	GEN-9
PCS-3	Paul McCormick	20180502-4014, 20180613-4001	GEN-9
PCS-3	Rik Johnson	20180502-4014, 20180613-4001	LU-10, SAFE-1, SAFE-11, SOCIO-1, CULT-1
PCS-3	Dr. Donna Lucy Frazio	20180502-4014, 20180613-4001	AIR-4
PCS-3	Barrington Cross	20180502-4014, 20180613-4001	ALTS-4, AIR-3, SAFE-11, SAFE-1, SAFE-16
PCS-3	Phillip Kramer, Mayor of Franklin Township	20180502-4014, 20180613-4001	AIR-5, AIR-3, CI-7, GEN-2
PCS-3	Dino Gupta	20180502-4014, 20180613-4001	AIR-3, GEN-1, SAFE-15, GEN-10
PCS-3	Eric Pene	20180502-4014, 20180613-4001	GEN-9
PCS-3	Aniko Somogyi, Theresa's Farm	20180502-4014, 20180613-4001	SAFE-4, ALTS-12, SAFE-1
PCS-3	Jason Van Scoten	20180502-4014, 20180613-4001	GEN-9
PCS-3	Andrew Holland	20180502-4014, 20180613-4001	GEN-9
PCS-3	Priscilla Lee	20180502-4014, 20180613-4001	GEN-10, GEN-2
PCS-3	Shubhendu Singh	20180502-4014, 20180613-4001	GEN-1, SAFE-10, SAFE-4, SAFE-11, GW-4, CI-7, AIR-3, LU-7, GEN-3
PCS-3	Dr. Bijal Desai	20180502-4014, 20180613-4001	AIR-3
PCS-3	Linda Powell	20180502-4014, 20180613-4001	AIR-3, AIR-4

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PCS-3	Laura Cisar	20180502-4014, 20180613-4001	AIR-4, CI-9
PCS-3	Surendra Tiwari	20180502-4014, 20180613-4001	AIR-3, AIR-18, SAFE-11, AIR-5, AIR-4
PCS-3	Bernadette Maher	20180502-4014, 20180613-4001	GEN-1, AIR-3, AIR-18, AIR-4
PCS-3	Dr. Subhashis Banerjee	20180502-4014, 20180613-4001	AIR-3, AIR-5, AIR-4
PCS-3	Ellen Schorr	20180502-4014, 20180613-4001	AIR-3
PCS-3	Don Schneider	20180502-4014, 20180613-4001	SAFE-7, SAFE-4, SAFE-17
PCS-3	Elizabeth Roedell	20180502-4014, 20180613-4001	GEN-10, WILD-4, WILD-8
PCS-3	Arayna Conway-Swanston	20180502-4014, 20180613-4001	GW-5, SAFE-1, SOCIO-1
PCS-3	Melanie Febinger	20180502-4014, 20180613-4001	AIR-4, LU-7
PCS-3	Edward Febinger	20180502-4014, 20180613-4001	AIR-3, AIR-18, SAFE-4, SAFE-11
PCS-3	Frances Anne Gavigan	20180502-4014, 20180613-4001	GW-5, SAFE-4, SAFE-11, SAFE-16, GEN-1
PCS-3	Brian Lee	20180502-4014, 20180613-4001	SAFE-11, SAFE-16, GW-6, SAFE-1, AIR-3, GEN-1, GW-4
PCS-3	John McLoughlin	20180502-4014, 20180613-4001	GEN-9
<u>PCS-4: Quarryville, Pennsylvania</u>			
PCS-4	David Butterworth	20180503-4000	GEN-9
PCS-4	Mark Fischer	20180503-4000	GEN-9
PCS-4	Jacob Hyder	20180503-4000	GEN-9
PCS-4	Candice Arnold	20180503-4000	GEN-9
PCS-4	Tyler Sasse	20180503-4000	GEN-9

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PCS-4	Bill Kellogg	20180503-4000	GEN-9
PCS-4	Walter Allen	20180503-4000	GEN-9
PCS-4	Tom Shepstone	20180503-4000	GEN-9
PCS-4	Barrett Arnold	20180503-4000	GEN-9
PCS-4	David Horn	20180503-4000	GEN-9
PCS-4	Nick Bozza	20180503-4000	GEN-9
PCS-4	Guy Williams	20180503-4000	GEN-9
PCS-4	Stephanie Catarino-Wissman	20180503-4000	GEN-9

Intervenors

INT-1	Zoe A. Rennie	20180330-5292	GEN-1
INT-2	Katherine D. Schassler	20180330-5294	GEN-1
INT-3	Grace R. Logan	20180330-5295	AIR-3
INT-4	Olivia Hadley	20180330-5300	GEN-1
INT-5	Noelle Picone	20180402-5043	GEN-1, GEN-3
INT-6	Amanda Eisenhower	20180402-5052	GEN-1
INT-7	Alyssa Lau	20180402-5053	GEN-1
INT-8	Johnathan H. Lu	20180402-5054	GEN-1
INT-9	Claire L. Adair	20180402-5055	GEN-1
INT-10	Charles D. Copeland	20180402-5056	GEN-1, AIR-5, SAFE-15
INT-11	Clare Martin	20180402-5227	GEN-1
INT-12	Ethan M. Katz	20180403-5010	GEN-1
INT-13	Anagha Mahesh	20180403-5011	GEN-1
INT-14	Srindhi Ramakrishna	20180403-5012	GEN-1
INT-15	Diana Vazquez Romo	20180403-5013	GEN-1
INT-16	Alya Ahmad	20180403-5014	GEN-1
INT-17	Eli J. Berman	20180403-5015	GEN-1
INT-18	Kenji Cataldo	20180403-5016	GEN-1
INT-19	Peter C. Schmidt	20180403-5017	GEN-1
INT-20	Samuel C. Venturella	20180403-5166	GEN-1
INT-21	Luke Soucy	20180403-5169	GEN-1

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INT-22	Jill Shah	20180403-5172	GEN-1
INT-23	Emily Reinhold	20180403-5182	GEN-1
INT-24	Remi C. Shaul-Thompson	20180403-5199	GEN-1
INT-25	William Conte	20180404-5018	GEN-1
INT-26	Matthew Rosen	20180404-5019	GEN-1
INT-27	Rebecca Sobel	20180404-5020	GEN-1
INT-28	Yael Marans	20180404-5021	GEN-1
INT-29	Ricki Heicklen	20180404-5022	GEN-1
INT-30	Rafi Lehmann	20180404-5023	GEN-1
INT-31	Nicolas Ng	20180404-5024	GEN-1
INT-32	Madeleine Dietrich	20180404-5025; 20180404-5026	GEN-1
INT-33	William Simon	20180404-5027	GEN-1
INT-34	Brandon Ward	20180404-5028	GEN-1
INT-35	Connie Miao	20180404-5029	GEN-1
INT-36	Zachariah A. Kish-DeGiulio	20180404-5030	GEN-1
INT-37	Sophia Feist	20180404-5031	GEN-1
INT-38	Aparna Raghu	20180404-5032	GEN-1
INT-39	Noah Mihan	20180404-5033	GEN-1
INT-40	Sara Anjum	20180404-5060	GEN-1
INT-41	Risa Gelles-Watnick	20180404-5104	GEN-1
INT-42	Camille Liotine	20180404-5127	GEN-1
INT-43	Emily Ho	20180404-5211	GEN-1
INT-44	Audrey Hahn	20180405-5019	GEN-1
INT-45	Evelyn K. Karis	20180405-5020	GEN-1
INT-46	Arjun S. Krishnan	20180405-5024	GEN-1
INT-47	Nathan C. Leach	20180405-5027	GEN-1
INT-48	Andrew Kaneb	20180405-5036	GEN-1
INT-49	Barrett Gray	20180405-5037	GEN-1
INT-50	Aisha Tahir	20180405-5038	GEN-1
INT-51	Kavya Chaturvedi	20180405-5039	GEN-1

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INT-52	Ben J. Bollinger	20180405-5040	GEN-1
INT-53	Nalanda Sharadjaya	20180405-5041	GEN-1
INT-54	Morgan Nicolao	20180405-5042	GEN-1
INT-55	Malka A. Himelhoch	20180405-5043	GEN-1
INT-56	Naomi Cohen-Shields	20180405-5045	GEN-1
INT-57	Nathan Finkle	20180405-5046	GEN-1
INT-58	Zoe Zeitler	20180405-5165	GEN-1
INT-59	Susan Chapin	20180413-5001	GEN-1
INT-60	Lee M. Ziesche	20180405-5119	GEN-47
INT-61	Chelsie Alexandre	20180405-5232	GEN-1
INT-62	Jack Aiello	20180405-5249	GEN-1
INT-63	Natalie Stein	20180405-5261	GEN-1
INT-64	Andy Zheng	20180405-5265	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
INT-65	Allyson Adrian	20180405-5269	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
INT-66	Anna Marsh	20180405-5270	GEN-1
INT-67	Carla Dias	20180406-5014	GEN-1
INT-68	Wilbur Wang	20180406-5019	GEN-1
INT-69	Christina Moon	20180406-5020	GEN-1
INT-70	Fumika Mizuno	20180406-5021	GEN-1
INT-71	Jackson Vail	20180406-5023	GEN-1
INT-72	Shanna Estevez	20180406-5035	GEN-1
INT-73	Madison Spinelli	20180406-5041	GEN-1
INT-74	Sasha L. Culley	20180406-5060	GEN-1
INT-75	Matthew A. Kritz	20180409-5249	GEN-1
INT-76	Margarita Estevez	20180410-5028	GEN-1
INT-77	Lew M. Simon	20180410-5029	SAFE-10, AIR-3, AQU-1, GEN-2
INT-78	Seth Solomon	20180410-5030	AIR-3, SOCIO-1
INT-79	Joan M. Flynn	20180410-5031	CI-9
INT-80	Meaghan Shevlin	20180410-5032	AIR-3, AQU-1, SAFE-10
INT-81	Rebecca Solomon	20180410-5033	AQU-1, GEN-1

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INT-82	Clean Ocean Action, Inc. (Andrew J. Provence, Esq., Litwin & Provence, LLC)	20180410-5070	GEN-1
INT-83	Kimberly Francois	20180410-5091	GEN-1
INT-84	Harsh Bhargava	20180410-5145	GEN-27, AIR-4, AIR-5, AIR-6, CI-7, AQU-9, ALTS-4
INT-85	Isabel O'Connell	20180410-5168	GEN-1
INT-86	Kimberly Hauer	20180411-5004	GEN-1
INT-87	Francis Khoury	20180412-5048	CI-9, GEN-20, LU-20, ALTS-4
INT-88	Raya Arbiol	20180413-5012	GEN-1
INT-89	Mary Martin	20180413-5014	GEN-1
INT-90	Lisa Harrison	20180413-5015	GEN-47
INT-91	Darren Klein	20180413-5016	GEN-1
INT-92	Bernice L. Tompkins	20180413-5017	GEN-1
INT-93	Thomas Ross	20180413-5077	GEN-30
INT-94	Robert J. Wood	20180413-5190	GEN-3, CI-9, ALTS-4
INT-95	Ellen Whitt	20180416-5051	GEN-1
INT-96	Angelina Garneva	20180416-5077	GEN-2, CI-9
INT-97	Sebastian LR Benzecry	20180417-5019	GEN-1
INT-98	Allison Huang	20180417-5026	GEN-1
INT-99	Katie Kubala	20180417-5029	GEN-1
INT-100	Sam Bartusek	20180417-5030	GEN-1
INT-101	Francisca Weirich-Freiberg	20180417-5032	GEN-1
INT-102	Riley Heath	20180417-5033	GEN-1
INT-103	Stuart Pomeroy	20180418-5013	GEN-1
INT-104	Stephen Polcyn	20180418-5019	GEN-1
INT-105	Atakan Baltaci	20180418-5023	GEN-1
INT-106	Isabelle Kuziel	20180418-5024	GEN-1
INT-107	Narek Galstyan	20180418-5025	GEN-1
INT-108	Bennett S. Weissenbach	20180418-5026	GEN-1
INT-109	Sophia Winograd	20180418-5028	GEN-1
INT-110	Catherine Nieves	20180419-5154	GEN-3, GEN-20, SAFE-20, AQU-39, CI-2
INT-111	Edward J. Power	20180418-5046	AQU-9, SOCIO-6, CI-9

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INT-113	Stephanie Zepka	20180419-5055	GEN-1
INT-114	Nancy LaCorte	20180419-5056	GEN-1
INT-115	Naomi Nierenberg	20180419-5059	GEN-1
INT-116	Lee Clark	20180419-5060	GEN-1, GEN-3, AQU-32
INT-117	Vanna Haniff	20180419-5061	GEN-20
INT-118	MaryAlice Cicerale	20180419-5062	GEN-3, AQU-32
INT-119	Thomas A. Steinberg	20180419-5063	GEN-3, AQU-32, AIR-1
INT-120	John D. Muth	20180419-5064	GEN-1
INT-121	Larry Klein	20180419-5065	GEN-1
INT-122	Jane McCarty	20180419-5066	GEN-1
INT-123	Numeriano O. Tan	20180419-5067	GEN-1
INT-124	Joseph Ort	20180419-5068	GEN-1
INT-125	Judith F. Malin	20180419-5069	GEN-1
INT-126	Daniel Lima	20180419-5070	GEN-1
INT-127	Seth Malin	20180419-5071	GEN-1
INT-128	Clare Hilger	20180419-5076	GEN-3
INT-129	Thea R. Zalabak	20180420-5015	GEN-1
INT-130	James Leonzio	20180420-5016	GEN-2, SOCIO-6, GEN-3
INT-131	Vanna Haniff	20180420-5019	GEN-20
INT-132	Margaret Day	20180420-5113	GEN-2, SOCIO-6, SAFE-1
INT-133	Kathleen McNamara	20180423-5049	GEN-5
INT-134	Matthew Myers	20180423-5051	GEN-1
INT-135	Ellen Mc Connell	20180423-5061	GEN-3, AQU-32
INT-136	James Mc Connell	20180423-5100	GEN-3, AQU-32
INT-137	Lisa M. Gallaudet	20180424-5012	GEN-2, SOCIO-6, GEN-3, CI-9
INT-138	Sebastian Quiroz	20180425-5018	GEN-1
INT-139	Shafaq Khan	20180425-5019	GEN-1
INT-140	Theodore R. Trevisan	20180425-5020	GEN-1
INT-141	Michael G. Bell	20180425-5021	GEN-1
INT-142	Kristina Borjesson	20180425-5145	SAFE-1, AIR-3, ALTS-2, AIR-5, SOCIO-9

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INT-143	Raphael Wakefield	20180426-5041	CI-9
INT-144	Dennis Lukach	20180426-5047	GEN-1, AQU-9, AQU-32
INT-145	Sommyr Nate Pochan	20180426-5055	GEN-3, SAFE-15, SOCIO-10, SOCIO-9, GEN-2, SOCIO-6, CI-9, CI-9
INT-146	RePowered Inc. (Siddika Pasi, Owner/Principal Consultant)	20180426-5072	GEN-1
INT-147	Gabrielle L. Engh	20180426-5185	GEN-2, SOCIO-6, GEN-1, CI-9
INT-148	Donald S. Schneider	20180426-5212	GEN-1
INT-149	Alexandra Zevin	20180426-5249	SOCIO-6, GEN-2
INT-150	Brillian Bao	20180430-5047	GEN-1
INT-151	Dorothy M. Ji	20180430-5147	GEN-1
INT-152	Phoebe Warren	20180430-5355	GEN-1
INT-153	Cyril Phillips	20180501-5069	GEN-1
INT-154	Mary Lou Bak	20180501-5229	GEN-1
INT-155	Mary Belasco	20180503-5008	GEN-1
INT-156	Maya Eashwaran	20180504-5033	GEN-1
INT-157	David B. FitzPatrick	20180504-5034	GEN-1
INT-158	Michaela S. Daniel	20180504-5035	GEN-1
INT-159	Olivia Kusio	20180504-5036	GEN-1
INT-160	Kristen Albrecht	20180504-5037	GEN-1
INT-161	Lydia M. Watt	20180504-5038	GEN-1
INT-162	Kayla E. Memis	20180504-5039	GEN-1
INT-163	Ysabel Ayala	20180504-5040	GEN-1
INT-164	William Sweeny	20180504-5041	GEN-1
INT-165	Rebecca Blevins	20180504-5042, 20180504-5043	GEN-1
INT-166	Tajreen Ahmed	20180504-5044	GEN-1
INT-167	Emily McDonnell	20180504-5045	GEN-1
INT-168	Malika Oak	20180504-5046	GEN-1
INT-169	Alexandra Levinger	20180504-5048	GEN-10, SAFE-4, GEN-27, GEN-8, AIR-5, AIR-4, WILD-12, AIR-6, SOCIO-13, AQU-9, AQU-1, AQU-12
INT-170	Melita Piercy	20180504-5049	GEN-1

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INT-172	Vienna Lunking	20180504-5051	GEN-1
INT-173	Dennis Duffin	20180504-5052	GEN-1
INT-174	Maressa K. Cumbermack	20180504-5053	GEN-1
INT-175	Jason Kim	20180504-5054	GEN-1
INT-176	Beverly Shen	20180504-5055	GEN-1
INT-177	Victoria Talvola	20180504-5056	GEN-1
INT-178	Beverly Shen	20180504-5057	GEN-5
INT-179	Isaac Wolfe	20180504-5058	GEN-1
INT-180	Anhar Karim	20180504-5059	GEN-1
INT-181	Jasmine M. Lu	20180504-5060	GEN-1
INT-182	Jacob Berman	20180504-5061	GEN-1
INT-183	Mimi Chung	20180504-5062	GEN-1
INT-184	Julius Y. Foo	20180504-5063	GEN-1
INT-185	Joshua J. Maccoby	20180504-5064	GEN-1
INT-186	Lucy Lin	20180504-5065	GEN-1
INT-187	Daniel Stanley	20180504-5066	GEN-1
INT-188	Hannah T. Tandy	20180504-5067	GEN-1
INT-189	Christine Lu	20180504-5068	GEN-1
INT-190	Nikhita C. Salgame	20180504-5199	GEN-1
INT-191	Ruth Hansen	20180507-5017	GEN-1, GEN-6
INT-192	Ruth Hansen	20180507-5019	GEN-6
INT-193	Ruth Hansen	20180507-5020	SAFE-11, GEN-1, ALTS-4, GW-5
INT-194	Craig Rubano	20180507-5021	GEN-1
INT-195	Bridgette Kunst	20180507-5022	GEN-1
INT-196	Andrew Wu	20180507-5041	GEN-1
INT-197	Thomas J. Vajtay	20180510-5028	SAFE-10, GEN-1
INT-198	Eva Welchman	20180511-5051	CI-2
INT-199 (same as CO-34)	Democratic Socialists of America	20180514-5547	GEN-43, CI-9, CI-12
INT-200	Brigitte Kinniburgh	20180514-5559	CI-9, GEN-43

TABLE M-1 (cont'd)

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Letter Code	Commenter Name/Affiliation	Accession Number	Comment Code(s)
INT-201	Deep Shah	20180514-5566	GEN-29
INT-202	Ian C. Kinniburgh	20180514-5575	GEN-10, CI-9
INT-203	Susan London	20180514-6015	GEN-1
INT-204	Julie Kostelnik	20180514-6145	GEN-1
INT-205	Ruth Hansen	20180515-5028	SAFE-10
INT-206	Ruth Hansen	20180515-5030	SAFE-10
INT-207	Ruth Hansen	20180515-5033	SAFE-10
INT-208	Ruth Hansen	20180515-5038	SAFE-10
INT-209	Ruth Hansen	20180515-5078	GEN-29
INT-210	Julie Kostelnik	20180515-5122	GEN-1
INT-211	Wesley M. Morris, Jr.	20180515-5135	GEN-1, SURF-2, GW-5, SAFE-1, GW-6, GEN-1
INT-212	Eva Welchman	20180515-5138	CI-9, GEN-2, SAFE-10, SAFE-1, SAFE-17
INT-213	Eva Welchman	20180515-5140	SAFE-10, SAFE-1, SAFE-17
INT-214	Jill Morris	20180515-5141	GEN-1
INT-215	Lu Zhang	20180515-5142	GEN-1
INT-216	PPL Electric Utilities Corporation	20180515-5151	GEN-47
INT-217	Kathleen (Kip) P. Cherry	20180515-5158	CI-9, AIR-4, GEN-10
INT-218	Judith K. Canepa	20180514-5564	SAFE-10
INT-219	Judith K. Canepa	20180514-5570, 20180514-5584	SAFE-10
INT-220	Judith K. Canepa	20180514-5579	GEN-2, CI-9
INT-221	Judith K. Canepa	20180514-5586	SAFE-10
INT-222	No name given	20180517-5014	GEN-1
INT-223	Millennium Pipeline Company, L.L.C.	20180523-5051	GEN-47

TABLE M-2

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
General Comments		
GEN-1	<p>Many commenters provided general comments regarding their opposition to the Project, including comments about various environmental impacts that did not include specific details (e.g., statements of general concern for impacts on wetlands or wildlife; air quality impacts; safety; statements that quoted text from the draft EIS but provided no additional comments), as well as commentors who expressed opposition to the project but who stated they had not reviewed the EIS. Some commenters also contend that because the draft EIS identified certain Project-related impacts, the Project should not be approved (e.g., opposition to any level/amount of impact). A few commenters also noted opposition to the Project, but referred to it as an oil pipeline.</p>	<p>Comment noted. The draft and final EIS describe the potential impacts on environmental resources resulting from construction and operation of the projects. The EIS is comprehensive and thorough in its identification and evaluation of feasible mitigation measures to reduce those effects whenever possible. As discussed throughout the environmental analysis section of the EIS, we conclude that with implementation of Transco's impact avoidance, minimization, and mitigation measures, as well as their adherence to our recommendations, all Project effects would be reduced to less-than-significant levels.</p> <p>The EIS is not a decision document, and the environmental analysis is conducted irrespective of public opinion (for or against) regarding FERC, the NGA, U.S. energy policy, or the Project itself.</p>
GEN-2	<p>Comments that the purpose and need of the Project has not been established, that the Project would not benefit local areas crossed by the routes, and/or that changes in the Project schedule indicate the need has not been established. Commenters also disagree with the Project's purpose and need as described in the draft EIS. Further, commenters contend that the Project would be incompatible with New York State's goals to address climate change, New York City's goals to reduce reliance on fuel oil, and that the draft EIS referred to outdated New York City emissions goals. Some commenters also contend that natural gas transported by the Project will be exported, and express opposition to export. One commenter expressed concern that the public could not comment on the Project need because information related to National Grid was not publicly available on our docket.</p>	<p>FERC staff reviews applications for interstate natural gas pipeline projects in accordance with an applicant's stated objective(s) to disclose the environmental impacts of a proposal, to inform the decision makers, and, in accordance with NEPA, evaluate reasonable alternatives to a project.</p> <p>The purpose and need for the NESE Project is briefly discussed in section 1.1 of this EIS. The Commissioners at FERC ultimately have the authority to evaluate the merits of a project's objective and either approve the proposal, with or without modification, or decide to not approve the project. Should the Commission decide that a project is not in the public convenience and necessity, it would deny the project (in effect, selecting the No Action Alternative) versus designing or recommending a new project with different objectives.</p> <p>A project's need is established by the FERC Commission when it determines whether a project is required by the public convenience and necessity. The FERC's Certificate Policy Statement provides guidance as to how the Commission evaluates proposals for new construction, and establishes criteria for determining whether there is a need for a proposed project and whether it would serve the public interest. The Certificate Policy Statement explains that in deciding whether to authorize the construction of major new pipeline facilities, the Commission balances the anticipated public benefits against the potential adverse consequences. The Commission's goal is to give appropriate consideration to the enhancement of</p>

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
		competitive transportation alternatives, the possibility of overbuilding, subsidization by existing customers, the applicant's responsibility for unsubscribed capacity, avoiding the unnecessary exercise of eminent domain and disruptions of the environment.
GEN-3	Many commenters provided general comments regarding their specific opposition to the Raritan Bay Loop portion of the Project, including comments regarding impacts on the sea floor, impacts on marine wildlife, potential impacts on the shoreline and beaches from accidents and spills, and recreational and economic impacts. A few commenters also noted misconceptions about the proposed Raritan Bay Loop, including that it would proceed onshore on the Rockaway Peninsula.	<p>Comment noted. The draft and final EIS describe the potential impacts on environmental resources resulting from construction and operation of the Project. The EIS is comprehensive and thorough in its identification and evaluation of feasible mitigation measures to reduce those effects whenever possible. As discussed throughout the environmental analysis section of the EIS, we conclude that with implementation of Transco's impact avoidance, minimization, and mitigation measures, as well as their adherence to our recommendations, all Project effects would be reduced to less-than-significant levels.</p> <p>The EIS is not a decision document, and the environmental analysis is conducted irrespective of public opinion (for or against) regarding FERC, the NGA, U.S. energy policy, or the Project itself.</p>
GEN-4	Approximately 870 individuals were named in a form letter from Food and Water Watch that included comments on the adequacy of the draft EIS, including that the analysis in the EIS was flawed or inadequate, and our conclusions in the EIS are not appropriate or correct.	Comment noted. See also the response to comment GEN-10.
GEN-5	<p>We received 53 copies of a form letter (and variations) that included comments on air quality, health impacts, and safety. We note that these form letters make reference to the draft EIS not yet being issued, and therefore were prepared before we issued the document and are not specifically commenting on the draft EIS. In addition, we note that versions of this letter were previously submitted in October 2017, before issuance of the draft EIS, and the comments were taken into consideration in our analysis. Specifically, the letters contend there is inadequate air quality data to complete analysis of health and environmental impacts, and identify potential impacts from high-temperature exhaust from the compressor units on vegetation and trees, wildlife, and the public.</p> <p>The letters also state that Transco should use data from other Transco compressor stations to estimate potential methane leaks and exhaust at Compressor Station 206, provide total year emissions impacts for Compressor Station 206, and that air quality</p>	Comments noted. Our analysis in the draft EIS considered the comments that were submitted in earlier versions of this letter.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	should be monitored at Trap Rock Quarry instead of the further away New Brunswick air quality monitor.	
GEN-6	General comments related to opposition to gas extraction activities, and associated risks and leaks. In addition, comments that we should consider potential impacts from gas extraction activities. Some commenters also state that the Project would violate the State of New York's ban on "fracking."	The NESE Project would not involve fracking. Section 1.3 includes a discussion of why we do not examine environmental impacts associated with natural gas production in this EIS. The proposed Project consists of a natural gas pipeline system with associated facilities and would not involve fracking; as such, any state regulations regarding fracking would not apply. Further, no state agencies provided comments regarding this issue.
GEN-7	Franklin Township and the Mayor and Council of Princeton filed resolutions expressing opposition to the Project.	The resolutions regarding opposition to the Project are noted.
GEN-8	Comments that Transco has made statements in public forums (e.g., company public relations statements or notifications) that the commenter contends are false or misleading. In addition, comments that information submitted by Transco is misleading (including incorrect mapping, inconsistent information on Project impacts).	The EIS was prepared based on information that Transco filed with us on the docket for the Project, as well as our own research and analysis. As such, statements made by Transco in other public forums are outside the scope of this EIS and not considered in our analysis.
GEN-9	General comments in support of the Project, including comments related to the need for the Project, economic benefits, and the potential for the Project to meet regional energy goals.	Comment noted.
GEN-10	Many commenters provided comments on the adequacy of the draft EIS, including that the analysis in the EIS was flawed or inadequate, and our conclusions in the EIS are not appropriate or correct. Commenters contend that our analysis and conclusions in the draft EIS are not adequate because Transco has not yet provided certain environmental data, or has committed to file after issuance of the draft EIS would not be available until after the close of the comment period, thereby limiting the public's ability to comment on potential impacts that may be identified in the materials. As such, commenters contend that our conclusions in the draft EIS cannot be accurate because the information was not yet provided. Some commenters also noted that our consultations with the NMFS and FWS are not yet complete, and contend that the NJDEP and NYSDEC responses to Transco regarding the adequacy of its permit applications leads to the conclusion that the draft EIS was inadequate. In addition, some commenters contend that certain comments submitted during scoping were not addressed in the EIS. Finally, based on the issues above,	<p>We disagree. The EIS discloses the potential impacts on environmental resources resulting from construction and operation of the Project. The EIS was prepared in accordance with NEPA, CEQ guidelines, and other applicable requirements. The EIS includes sufficient detail to enable the reader to understand and consider the issues raised by the proposed Project and addresses a reasonable range of alternatives. The EIS is consistent with FERC style, formatting, and policy regarding NEPA evaluation of alternatives and different types of impacts, including cumulative impacts. Duration and significance of impacts are discussed throughout the various EIS resource sections. The EIS is comprehensive and thorough in its identification and evaluation of feasible mitigation measures to reduce those effects whenever possible. Transco's construction and restoration plans contain numerous mitigation measures to avoid or reduce Project-related impacts.</p> <p>In addition to conducting its own independent analysis of the Project, FERC also relies on the expertise of federal, state, and local agencies who have regulatory authority and oversight of the numerous laws, rules, and regulations described in the EIS. The</p>

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	commenters state that that a revised draft EIS or supplemental EIS should be issued with a new comment period.	<p>outreach and agency engagement conducted for the Project is described in section 1. An applicant must also demonstrate that it has conducted surveys in accordance with a regulatory agency's protocols and/or the law, and consulted with the appropriate agency personnel and applied for the applicable permits.</p> <p>Regarding comments submitted during scoping, as discussed in section 1.3, we acknowledge that we received comments during scoping that raised issues that are outside the scope of this EIS. The purpose and scope of the EIS is discussed in section 1.2.</p>
GEN-11	In a report submitted by the Township of South Brunswick and the Eastern Environmental Law Center, Princeton Hydro commented that our analysis suggests that significant impact reduction can be accomplished not by avoiding the impacts but by relying upon mitigation to reduce them. In addition, the report contends that our conclusions regarding mitigation measures to reduce impacts are based on speculative and sometimes unspecified information.	We disagree. As discussed throughout the environmental analysis section of the EIS, we conclude that with implementation of Transco's impact avoidance, minimization, and mitigation measures, as well as their adherence to our recommendations, all Project effects would be reduced to less-than-significant levels.
GEN-12	One commenter contends that the draft EIS did not analyze the immediate areas affected by the Project.	We disagree. As stated in section 4.0, this analysis describes the existing natural and human environment and the potential impacts on it resulting from construction and operation of the NESE Project. This includes the areas directly affected by construction of the Project (e.g., acres of direct land disturbance as summarized in section 2), as well as potential indirect impacts on various environmental resources, including air quality, cultural resources, etc.
GEN-13	The EPA commented that the dredging methods for the offshore portion of the Raritan Bay Loop should have been finalized in the draft EIS to better disclose the associated impacts.	Comment noted. Since issuance of the draft EIS, Transco has revised its construction methods, including committing to use a clamshell dredge fitted with an environmental bucket which reduced the level of turbidity and sedimentation discussed in the draft EIS, and reduced the estimated volume of sediment to be excavated by over 500,000 cubic yards. The final EIS has been updated to incorporate and evaluate these changes.
GEN-14	Comment that the number of exhaust stacks described in section 2.1.2.2 is inaccurate.	Section 2.1.2.2 has been revised to state that two 50-foot-tall gas turbine exhaust stacks would be installed at Compressor Station 206.
GEN-15	The NJDEP commented that many HDD drilling fluid additives are not NSF/ANSI certified and would not be allowed. The agency further commented that the phrase "in general" should be removed in section 2.3.2.1 regarding additives being NSF/ANSI approved because in New Jersey "the water for all well and boring drilling	Comment noted. We expect that any specific requirements of the NJDEP related to HDD drilling fluid additives would be addressed in the appropriate state authorizations.

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Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	should be potable." In addition, the NJDEP stated that any fluid additives proposed for use in New Jersey waters would need to be approved by New Jersey prior to use.	
GEN-16	A member of the Franklin Township Council provided comments regarding the aboveground storage tanks at Compressor Station 206 for hydrocarbon liquids and oily water storage. Specifically, the Councilmember asked about the size of the tanks, how the hydrocarbons and oily water would be removed and how frequently, and what precautions would be taken against inflammation of the hydrocarbons during removal.	Section 4.3.1.8 has been revised to include the number and capacity of the bulk aboveground storage tanks.
GEN-17	Regarding the subsea cable crossings discussed in section 2.3.3.7, the EPA requested that the status of the 18 additional cables be indicated, and whether any agency permits are needed to cut or remove inactive cables. The EPA further requested that we indicate what would be done if an owner/administrator for a cable cannot be identified.	Section 2.3.3.8 (section 2.3.3.7 in the draft EIS) has been revised to reflect that Transco has stated that no cables are within the construction workspace and, further, any remaining old cables would be degraded to the point of no use. In addition, the New Jersey and New York SHPOs concurred the cables are unlikely to be present and concurred that no impacts on historic cables would occur. We agree.
GEN-18	The USACE provided comments regarding its requirements for pipeline depth on the offshore portion of the Raritan Bay Loop. Specifically, the USACE noted that when crossing a federal channel, Transco would be required to bury the pipeline a minimum of 15 feet, measured from the top of pipe or concrete armoring, below the authorized channel prism or if the existing bottom is at greater depth than the authorized channel prism, buried 15 feet or greater below the existing bottom. In addition, where the pipeline crosses underneath the USCG-designated Anchorage 28, Transco would be required to bury the pipeline 15 feet or greater below the existing bottom. In the absence of a federal channel and its side slope, the top of pipe would be required to be buried a minimum of 4 feet below the existing bottom. Where the pipeline is emplaced by jetting or clamshell bucket, the trench would need to be backfilled with borrowed material to provide the necessary cover. For the Neptune Channel crossing at MP 35.49, the concrete matting is proposed to be doubled and project above the natural bottom, not meeting burial requirements of 4 feet of cover outside federal navigation channels; as such, Transco would be required to revise the Project to meet the 4-foot cover requirement.	The final EIS has been revised to reflect ongoing consultations between Transco and the USACE regarding burial depth of the Raritan Bay Loop. Since issuance of the draft EIS, USACE has determined that the pipeline would be buried with a minimum of 7 feet of cover in anchorage area 28, at least 15 feet of cover in federally maintained shipping channels, and 4 feet of cover (or the equivalent in consolidated rock or concrete mattresses) at the two Neptune Cable crossings.

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Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
GEN-19	The NYSDEC requested additional details regarding the restoration and backfilling of areas where the jet trencher would be used to install the Raritan Bay Loop.	The hydrodynamic and sediment transport modeling conducted by RPS Group utilized the Suspended Sediment FATE (SSFATE) model which, RPS Group states, was further developed to include burial operations using water jet trenchers following dozens of technical studies demonstrating successful application of the model to dredging. Transco estimates the 95% of the material disturbed by the water jetting action would remain in the disturbed area and that the pipeline would settle beneath the fluidized seafloor to the required burial depth. As a result, Transco anticipates that no backfill would be needed over the pipeline where installed by jet trencher. The jet trencher would be followed by a drag bar to even out the seafloor. Within 30 days after installation, Transco would conduct a survey to confirm that the required burial depth was achieved. In the event that burial depth is not achieved, Transco has committed to consulting with the applicable agencies in determining whether to proceed with supplemental backfilling.
GEN-20	Comments that included misconceptions regarding the proposed Project facilities, including that the proposed pipeline would transport oil and that the Project would include offshore oil drilling or gas extraction. In addition, one commenter stated that the compressors should run on natural gas, not diesel or other fuels that have to be trucked in.	Section 2.0 provides a description of the proposed NESE Project. The proposed Project would not involve the transportation of oil, or offshore oil drilling or gas extraction. Compressor Station 206 is proposed to use natural gas-fired compressors, and the modifications at Compressor Station 200 would include installation of one electric motor-driven compressor; no diesel or other fuels would be used to power the compressors.
GEN-21	Commenters noted that our environmental recommendations use the term "should" and contend that the term "must" should be used for mandatory requirements. In addition commenters expressed concern that environmental mitigation measures and permit requirements would not be enforced during construction and operation of the Project. Some commenters also contend that phrases like "to the extent practicable" are inadequate when referring to Transco's mitigation commitments, and that additional discussion should be included of the measures that would be implemented if the proposed measures are not practicable. One commenter also contends that the recommended mitigation measures listed in section 5.2 are requests for additional information and details about monitoring procedures, not suggested mitigation measures; and that they do not include new recommendations for new impact avoidance, ionization, or compensation measures.	The environmental recommendations listed throughout section 4 of the EIS use the term "should" because they are recommendations from FERC staff to the Commission. FERC staff recommend these measures be included as conditions to any authorization issued by the Commission. When the conditions appear in section 5.2 of the EIS in the format we recommend for the Commission order, the term "shall" is used. If the Commission adopts our recommendations, they indeed become mandatory conditions of the Commission's authorization. If the Project is approved, the FERC would issue a Certificate with these conditions that must be fulfilled. In addition, Transco would be legally required to ensure its Project follows the construction procedures and mitigation measures described in its application and supplements, including responses to staff data requests and as identified in the EIS (unless modified by the Order). Failure to meet certain performance standards would result in issuance of noncompliance reports and, if the violation is repeated, could result in a stop-work order or enforcement actions by the FERC. If a company does not meet the conditions of the

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
		<p>Commission's orders, FERC staff has authority to refer the matter to its Office of Enforcement.</p> <p>FERC staff would ensure that all pre-construction conditions have been met prior to any approval to start construction. The results of outstanding surveys and other environmental information that is required to be filed before construction would be reviewed by FERC staff, and we would verify that the information does not alter the EIS conclusions. All of this information would also be available on the Commission website for review by other agencies and the public.</p> <p>Transco would be required to submit weekly reports documenting its construction and restoration activities. FERC staff would also periodically inspect the Project area during construction and restoration to ensure compliance with the Certificate and to verify that restoration is proceeding satisfactorily and, if any issues arise, that they are addressed. Also, Transco would be required to develop and implement an environmental complaint procedure that identifies contact information and documents problems/concerns and how and when they were resolved.</p>
GEN-22	Comments related to construction monitoring and enforcement of the environmental conditions during construction. Specifically, commenters expressed concern that FERC staff would not adequately monitor Transco's construction activities, and contend that Transco has not complied with environmental requirements on past projects. In addition, some comments state that Transco's construction and mitigation plans do not represent commitments from Transco.	See the response to comment GEN-21.
GEN-23	One commenter expressed concern that the reference to Transco being required to follow "the construction procedures and mitigation measures described in its application and supplements (including responses to staff data requests) and as identified in the EIS, unless modified by the Order" is inadequate because the reader "must look through all earlier documents to discover what these might be." The commenter also stated that Transco's commitments were not "linked to predicted adverse environmental and social impacts" and did not represent "binding commitments" from Transco.	See the response to comment GEN-21.
GEN-24	One commenter expressed concern that changes in Project design could be implemented after issuance of the final EIS without	Section 2.5.3 discusses the variance process during construction, including the approval process that would be required for changes in workspace location and construction methods.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	appropriate environmental review (i.e., issuance of a revised draft EIS).	
GEN-25	Comments regarding the offshore construction schedule and construction techniques, including Transco's revised schedule, which would change the effects on certain resources (e.g., piping plover nesting season), and comments that the draft EIS did not provide details on how offshore trench excavation would be completed.	<p>The EIS was prepared in accordance with NEPA, CEQ guidelines, and other applicable requirements. The EIS is consistent with FERC style, formatting, and policy regarding NEPA evaluation of alternatives and different impact types. The EIS is comprehensive and thorough in its identification and evaluation of feasible mitigation measures to reduce those effects whenever possible.</p> <p>While some information was pending at the issuance of the draft EIS, the lack of information does not deprive the public of a meaningful opportunity to comment on a substantial adverse environmental effect of the Project or a feasible way to mitigate or avoid such effect. The EIS includes sufficient detail to enable the reader to understand and consider the issues raised by the proposed projects, and addresses a reasonable range of alternatives.</p> <p>The final EIS has been revised to analyze impacts on environmental resources based on Transco's current construction schedule and proposed offshore excavation methods.</p>
GEN-26	Comments related to public outreach including complaints about the draft EIS public comment session format, and comments that additional comment sessions should be held in other Project areas (e.g., Manhattan, Staten Island, Rockaway Beach), or in a public building instead of a private hotel. In addition, some commenters stated that the location of the draft EIS comment session in Brooklyn, New York was not close enough to the Project area (for example, commenters listed the Rockaways or Staten Island as appropriate locations). Some also stated that the comment sessions were not true "public hearings." Commenters also state that the process and format for the comment sessions was not clearly communicated to the public. One commenter also expressed concern that the transcripts for the draft EIS comment sessions and the scanned written comments that were handed in at the comment sessions were not posted to our docket with sufficient time for the public to review and comment before the end of the comment period.	<p>The format of the draft EIS comment sessions was consistent with FERC's most recent public outreach efforts. In no public notice issued by the FERC notifying stakeholders of scoping or draft EIS comment meetings and sessions was the meeting referred to as a "hearing." FERC considers and weighs all comments equally regardless of which the format they are presented (orally, electronically, posted mail, etc.). Additionally, FERC's revised meeting format was developed primarily to ensure more people would have the opportunity to provide comments without some of the time constraints associated with the former meeting format.</p> <p>Regarding the location of public meetings and comment sessions, we note that locations are chosen based on a variety of factors, including distance to project facilities and venue availability and capacity. We believe the distances from the Project area to the nearest meetings were appropriate.</p> <p>The Notice of Availability of the draft EIS described the format of the comment sessions, and FERC staff were present at the sessions to answer questions about the format.</p>

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Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
		As discussed in section 1.3, all relevant environmental comments on the draft EIS that were received through mid-December 2018 have been considered by the FERC staff.
GEN-27	Several commenters state that the public outreach conducted for the Project was inadequate. Specifically, commenters contend that the draft EIS was prepared without adequate input from various stakeholders. One commenter identified the State of New Jersey; Old Bridge, New Jersey; and Sayreville, New Jersey. Commenters stated that the townships adjacent to the Compressor Station 206 site were not adequately notified, or that we should increase the scope of our outreach to landowners beyond those required in our regulations. Commenters also contend that the low number of attendees to the scoping session that was held in Brooklyn, New York indicates that potentially interested parties in New York City were inadequately notified, and that the number of organizations and individuals in New Jersey is higher than the number in Staten Island, Brooklyn, and Queens. One commenter also requested that Transco hold public hearings for the community to learn about the Project and hear each other's concerns. In addition, multiple submittals of form letters contend that there was not adequate outreach to the Princeton area. In addition, the form letter contends that we did not adequately consider comments in our analysis.	Section 1.3 describes the public review and outreach for the Project, which was thorough and adequate. The draft EIS was sent to municipalities near Compressor Station 206, including Montgomery Township, which was added to the environmental mailing list after production of the draft EIS. As further discussed in section 1.3, Transco hosted four open houses in the Project area to inform landowners, government officials, and the general public about the Project and invite them to ask questions and express their concerns.
GEN-28	Some commenters stated that New Jersey (e.g., NJDEP) state agencies should have participated as cooperating agencies for the preparation of the EIS, and some further contend that New Jersey state agencies were specifically prevented from participating as cooperating agencies.	No agencies were denied a request to participate as a cooperating agency. In our NOI, we asked agencies with jurisdiction by law and/or special expertise with respect to the environmental issues related to the Project to formally cooperate with us in the preparation of the EIS. Further, we reached out to potentially interested agencies if we believed they may have wanted to cooperate but did not respond to our NOI. After issuance of the draft EIS, several commenters stated that the NJDEP should have participated in our environmental review process. As noted above, the NJDEP assisted in our review of the NESE Project during our pre-filing process, including hosting an interagency meeting in Trenton, New Jersey on September 22, 2016. On April 17, 2017 the NJDEP elected to file as an intervenor in the NESE Project proceeding, after which the NJDEP could no longer participate in the environmental review process as a formal cooperating agency. However, the NJDEP continued to file comments on our docket, including comments on the draft EIS, which further informed the environmental review presented in this final EIS. In addition, the NJDEP participated in

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Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		meetings on December 12, 2017 and a conference call on August 13, 2018 regarding General Conformity.
GEN-29	Many commenters provided comments related to the timing of Transco's May 11, 2018 filing (and subsequent supplemental filings), including that the timing prohibited the public from adequately reviewing and commenting on the information. In addition, some commenters state that incorporating new data from Transco into the final EIS, instead of including it in the draft EIS, denies the public their right to participate in the environmental review process. Commenters further state that the comment period should be extended, or the draft EIS should be reissued to incorporate the information and a new comment period established.	<p>The EIS was prepared in accordance with NEPA, CEQ guidelines, and other applicable requirements. The EIS is consistent with FERC style, formatting, and policy regarding NEPA evaluation of alternatives and different impact types. The EIS is comprehensive and thorough in its identification and evaluation of feasible mitigation measures to reduce those effects whenever possible.</p> <p>The draft EIS comment period was consistent with FERC's typical comment period of 45 days. While some information was pending at the issuance of the draft EIS, the lack of information does not deprive the public of a meaningful opportunity to comment on substantial adverse environmental effects of the Project or a feasible way to mitigate or avoid such effects. The EIS includes sufficient detail to enable the reader to understand and consider the issues raised by the proposed Project, and addresses a reasonable range of alternatives.</p> <p>The final EIS includes additional information provided by Transco, cooperating agencies, and new or revised information based on substantive comments on the draft EIS.</p>
GEN-30	Comments that there is not sufficient time to review the draft EIS and requesting that we extend the draft EIS comment period.	The draft EIS comment period was consistent with FERC's typical comment period of 45 days. While some information was filed by Transco during the draft EIS comment period, the lack of this final information does not deprive the public of a meaningful opportunity to comment on substantial adverse environmental effects of the Project or a feasible way to mitigate or avoid such effects.
GEN-31	Comments that the public cannot fully comment on the Project because certain information has been filed as CEII or privileged.	Regulations require that certain documents containing sensitive information be filed as CEII or privileged. This information is reviewed by FERC staff and other regulatory agencies; however, it is not releasable to the public per federal statutes and FERC regulations.
GEN-32	Comments related to the role and responsibilities of the FERC, including comments that state the FERC should protect citizens, the environment, etc.	<p>FERC's mission statement, as stated on its website, is the following: "Assist consumers in obtaining reliable, efficient and sustainable energy services at a reasonable cost through appropriate regulatory and market means."</p> <p>When a federal action is triggered – in this case, a permit application is submitted to the FERC – the agency must fulfill the requirements of NEPA. The CEQ and FERC have developed regulations that</p>

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
		guide how NEPA is fulfilled. One such requirement is disclosing the impacts associated with a proposed action. Another aspect of CEQ's NEPA-implementing regulations is mitigation, which in summary is defined as avoiding or minimizing an impact, or compensating for the impact. FERC is not charged with protecting lands or resources but instead, through NEPA, to disclose the impacts associated with a proposed action and, as necessary, recommending alternatives or measures to avoid, minimize, or mitigate for an impact.
GEN-33	One commenter expressed concern that the accession numbers for the draft EIS comment session transcripts and the posted dates shown on our docket are misleading because they reflect the dates of the meetings, and not the dates that they were actually posted. In addition, the commenter expressed concern that all comments may not have been accurately recorded.	The accession numbers assigned to documents on the eLibrary system are intended to provide a unique identifier for each document filed. As discussed in section 1.3, all relevant environmental comments on the draft EIS that were received through mid-December 2018 have been considered by the FERC staff, which includes the transcripts of the draft EIS comment sessions. We reviewed the comments recorded in the transcripts and did not identify any issues regarding the accuracy of the comments.
GEN-34	The Eastern Environmental Law Center provided a copy of its May 3, 2018 letter to the NJDEP in which it provided comments regarding the NJDEP's review of Transco's Freshwater Wetlands Individual Permit and Flood Hazard Area Individual Permit applications.	Comment noted.
GEN-35	One commenter requested that Transco provide updated correspondence.	Transco's filings of supplemental environmental information typically include relevant correspondence with appropriate resource agencies.
GEN-36	Some commenters expressed concern regarding the validity of other comment letters received in support of the Project, specifically that these commenters may not live in close proximity to the proposed facilities.	As discussed in section 1.3, all relevant environmental comments on the draft EIS that were received through mid-December 2018 have been considered by the FERC staff. Statements in support of the Project are noted, but do not materially affect the environmental analysis in the EIS.
GEN-37	One commenter noted that the FERC does not have a "What Do I Need to Know" booklet for offshore projects, as we do for onshore projects.	Comment noted. The referenced booklet is intended to provide landowners with information regarding interstate natural gas pipeline systems on their property.
GEN-38	The NJDEP commented that table 2.3.2-1 lists the Ambrose Channel HDD as being located in New York, but the Project Facility Maps in appendix B show the HDD crossing in New Jersey.	Table 2.3.2-1 has been revised to show the Ambrose Channel HDD is located in New Jersey.
GEN-39	One commenter noted that the schedule for HDD activities for the Madison Loop and Raritan Bay Loop is incorrect in table 2.3.2-1.	Table 2.3.2-1 has been revised to reflect Transco's current proposed construction schedule.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
GEN-40	The NJDEP commented that the description and figure of the clamshell dredge barge provided in section 2.3.3.1 is not "typical."	Comment noted. Table 2.3.3-2 provides additional information regarding the typical marine vessels proposed for use during construction of the Project, including typical draft and dimensions.
GEN-41	The EPA commented that table 2.3.3-3 "states that the total estimated volume of material to be dredged for the Long CP Power Cable HDD Exit Pit and Subsea Anode Sled is 490 cubic yards. However, in Section 2.3.3.6 (Ancillary Facilities) it states that 9,820 cubic yards of material would be dredged from that area to contain drilling fluid as well as the anode sled."	Table 2.3.3-3 has been revised to reflect updated information from Transco, and the referenced discrepancy has been resolved.
GEN-42	One commenter noted an incorrect reference in the text to table 4.10.1-11 in section 4.10.1.1, which should have been 4.10.1-7.	Section 4.10.1.1 has been revised to correct the table reference.
GEN-43	Some commenters noted an incorrect cross-reference in section 4.12.4 (Climate Change) to section 4.10.1.4, instead of section 4.10.1.5.	The final EIS has been revised to correct the reference to the discussion of GHG emissions from construction and operation of the Project to section 4.10.1.5.
GEN-44	One commenter noted a discrepancy in the filing timeframe in the environmental recommendation regarding Transco's Construction Emission Plan. The commenter noted that the recommendation in section 4.10.1.4 listed "prior to the close of the draft EIS comment period," but the summary discussion in section 5.1.10 states "prior to construction."	Comment noted. In its filing dated May 11, 2018, Transco provided its Construction Emission Plan in response to environmental recommendation no. 33 in the draft EIS.
GEN-45	The NJDEP provided comments on Transco's Plan, specifically that Transco "shall review the Standards for Soil Erosion and Sediment Control in New Jersey which can be found on the Department of Agriculture website, contact the county agent, and develop a plan to address acid soil conditions that likely will occur along the Madison Loop."	Comment noted. We expect that any specific construction and restoration measures would be reviewed and conditions in the appropriate state authorizations.
GEN-46	The NJDEP provided comments correcting two USGS citations in appendix I.	The referenced citations have been revised.
GEN-47	Several submittals did not include comments on environmental issues. Some of these included statements of opposition to Transco's request for the FERC to deny late motions to intervene.	Comments noted. The EIS discloses the environmental impacts that would occur if the NESE Project is constructed. The Commission may address non-environmental comments in its Order.
GEN-48	Comments related to other federal, state, and local permits, licenses, approvals, and consultations for the Project. In addition, various agencies and groups provided comments regarding the status of Transco's permit applications, and permits/consultations that may be required for the Project.	Comment noted. Table 1.5-1 lists the major environmental permits, approvals, and consultations for the Project. As discussed in section 1.5, Transco would be responsible for obtaining all applicable permits and approvals to construct and operate the Project regardless of whether they appear in this table or not.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
GEN-49	One comment was directed at the NJDEP, requesting that the agency hold two separate hearings on Transco's permit applications because the issues near Raritan Bay differ from those near proposed Compressor Station 206.	Comment noted.
GEN-50	Comment that the Project would violate New Jersey State law, specifically the Shore Tourism and Ocean Protection from Offshore Oil and Gas Act.	As discussed in section 1.5, Transco would be responsible for obtaining all applicable permits and approvals to construct and operate the Project regardless of whether they appear in this table or not.
GEN-51	The USFWS, New Jersey Field Office commented that it will defer to the NJDEP, Division of Land Use Regulation and to the NJDFW for the appropriate seasonal restrictions to avoid or minimize adverse impacts of in-water project activities on freshwater fish following review of Transco's permit application pursuant to the New Jersey Freshwater Wetlands Protection Act (N.J.S.A. 13:9B).	Comment noted.
GEN-52	In a letter dated May 31, 2018, the PADEP filed with the FERC a copy of its section 401 Water Quality Certification granted for the Project.	Comment noted.
GEN-53	The NJDEP, Bureau of Marine Water Monitoring commented that it will not issue a permit for the Project because there will be no harvesting of shellfish. However, the agency noted there is an area of shellfish waters within the Raritan Bay Loop portion of the Project that will affect shellfish waters used for depuration and, as such, requested to be notified 30 days prior to the start of drilling for this portion of the Project.	Comment noted. We expect that any notification requirements would be part of the appropriate state authorizations.
GEN-54	The NJDEP provided comments regarding the completeness of Transco's revised applications for a Freshwater Wetlands Individual Permit, a Flood Hazard Area Permit, an In-Water and Upland Waterfront Development Permit, and a Coastal Wetland Permit, including a list outlining deficiencies in the revised applications.	Comment noted. We expect that any specific construction and restoration measures would be reviewed and conditions in the appropriate state authorizations.
GEN-55	The EELC provided us with a copy of a letter addressed to the NJDEP that included its comments on Transco's applications for a Freshwater Wetlands Individual permit, Coastal Wetlands Permit, In-Water Waterfront Development Individual Permits, and Upland Waterfront Development Individual permit. The EELC letter included a report prepared by Princeton Hydro that contends Transco's applications to the NJDEP are incomplete and provide insufficient information to conclude that the Project would not result in adverse impacts.	Comment noted. We expect that any specific construction and restoration measures would be reviewed and conditions in the appropriate state authorizations.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
GEN-56	Approximately 110 copies of a form letter addressed to the NJDEP were filed regarding Transco's water quality permit applications. The letters expressed opposition to the Project, urged the NJDEP to deny Transco's water quality permit applications, asked that the NJDEP increase access for public review of the application materials, and requested that NJDEP hold separate public hearings in each area affected by the Project. In addition, the Township of South Brunswick filed a copy of a letter to the NJDEP urging denial of Transco's applications.	The comments addressed to the NJDEP are noted. We expect that any specific issues addressed to the NJDEP regarding its review of the Project would be addressed in the appropriate state authorizations.
GEN-57	The NYSDEC commented that it may prohibit side-casting of dredged materials as a condition of any Water Quality Certification.	Comment noted. We expect that any specific construction and restoration measures would be reviewed and conditions in the appropriate state authorizations.
GEN-58	The NYSDEC commented that it is unable to confirm whether the jet trencher can be equipped with a drag beam to reinstate pre-existing contours. The NYSDEC also stated that if drag beam equipment is proposed for use during the pipeline installation, more information should be provided in the final EIS and in the Water Quality Certification application to NYSDEC so that the impacts of this methodology can be fully assessed.	See response to GEN-19.
GEN-59	The Chester County Planning Commission requested that Chester County and East Whiteland Township be provided with the contact information for Transco's EIs during construction to facilitate notifications between county departments, and to inform Transco if there are issues or concerns on behalf of residents.	Comment noted. We expect that any notification requirements would be addressed during Transco's consultations with Chester County.

Alternatives

ALT-1	General comments that alternative routes should be considered (e.g., routes that avoid populated areas). In addition, commenters contend that our alternatives analysis is inadequate because the need for the Project has not been established and because the scope of our review was overly limited by requiring that the natural gas conveyed by the Project be delivered to the Rockaway Transfer Point in the same general timeframe as the Project. Commenters also contend that our analysis relied too heavily on data provided by Transco and that we did not independently confirm the accuracy of information filed by Transco.	As explained in the EIS, major route alternatives to Transco's proposed looping were not considered because looping results in less environmental impact than greenfield routing. Section 3.2.2.2 does, however, evaluate various combinations of looping and compression increases at existing stations that could potentially avoid construction of proposed Compressor Station 206. Sections 1.1 and 1.2.1 of the EIS explain that the Commission will consider environmental and non-environmental factors in determining if the Project is in the public convenience and necessity. Regarding the necessity of delivering the capacity of the Project to the Rockaway Transfer Point, section 1.1 notes that the customer, National Grid, determined the Rockaway Transfer Point to be the only delivery point that could serve National Grid's projected demand
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TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
		<p>for natural gas where it will be needed on its system. In its comments on the draft EIS in accession number 20180514-5995, National Grid reiterated its need for the incremental capacity of the NESE Project and restated that the Project is critical to National Grid's ability to continue conversion of oil-to-gas building heating systems in New York City. Thus, other natural gas transmission alternatives must also make delivery to the Rockaway Transfer Point to meet the Project purpose and need.</p> <p>As detailed in the EIS, FERC's staff of experienced scientists and engineers independently reviewed and analyzed all of the information filed by Transco. Furthermore, FERC staff did not work in a vacuum. As detailed in the record and throughout the EIS, numerous federal, state, and local agencies including the USACE, FWS, EPA, NMFS, NJDEP, NYSDEC, and New York City reviewed information from Transco and assisted in our environmental review of the Project. The USACE, EPA, and New York City specifically assisted in preparing the EIS. We further clarify that Transco did not participate in preparing the EIS as misunderstood by some commenters.</p> <p>FERC staff did not lack objectivity by utilizing information gathered by Transco, but rather Transco provided information as specifically requested by the FERC and other agencies and as required by federal regulation. The docket for this proceeding documents the significant level of critical review and oversight from the FERC and other agencies over a nearly 3-year period.</p>
ALT-2	Commenters assert that the draft EIS failed to adequately assess the No Action Alternative and specifically failed to establish a baseline against which the proposed action and other action alternatives can be compared.	As stated in section 3.1 of the EIS, selection of the No Action Alternative would avoid all of the environmental impacts directly attributable to the NESE Project as detailed in section 4.0. Thus, a resource-by-resource comparison of the No Action Alternative to the NESE Project is unnecessary as it is clear that the impacts of the NESE Project would not occur if the No Action Alternative is selected.
ALT-3	Comment that the EIS should consider alternative sources of natural gas (e.g., methane capture from landfills).	Section 1.3 of the EIS explains that evaluating the source of the natural gas transported by the Project is beyond the scope of our review but also notes that the nearest natural gas production to the NESE Project is approximately 80 miles from the Quarryville Loop.
ALT-4	Comments regarding the need to consider renewable energy options, including that the cost of the Project could be better	As explained in the introduction to section 3.0, because renewable energy sources are not natural gas transportation alternatives, and

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	invested into renewable options, and that renewable energy projects generate more employment.	therefore, do not meet the purpose and need of the Project, they were not considered in our alternatives analysis.
ALT-5	The NYSDEC commented that our inclusion of the purpose of the NESE Project as a factor in our analysis of renewable energy alternatives inappropriately excludes from consideration other various alternatives, including consideration of the No Action Alternative and of using renewable energy and conservation measures to reduce natural gas demand. The NYSDEC further commented that implementing conservation measures and promoting the use of renewable energy would provide significant environmental advantages, particularly when compared to the additional production, supply, and combustion of natural gas because of the Project-related impacts on climate change, GHG, and other air pollutant emissions associated with natural gas, as well as the other environmental impacts associated with the construction of the NESE Project. The NYSDEC requested that these options be considered further and discussed in the final EIS.	See responses to comments ALT-1 and ALT-4.
ALT-6	Comment that the analysis of offshore alternatives is inadequate, including that the comparison should have included consideration of impacts on hard clam areas; contaminated sediments; and costs. Commenter also contends that there is insufficient data to indicate that a route parallel to Transco's existing LNYBL pipeline Alternative 1) would be unsafe or potentially interrupt existing gas service.	As explained in section 3.3, Transco consulted with the USACE, NJDEP, NYSDEC, and other agencies in developing the proposed route for the Raritan Bay Loop, and the USACE formally assisted us in our environmental review of the Project. The EIS explains that <u>one</u> of the concerns with Alternative 1 is safety and reliability of the existing LNYBL and Neptune cable, but also discusses other concerns with Alternative 1 including complex HDDs and prograding of the nearby Sandy Hook Channel. We also note that, in our interactions with the agencies involved in routing the pipeline, none expressed significant interest in Alternative 1. Regarding use of contaminated sediment data, as explained in the EIS, we utilized the same source of data to normalize the comparison of alternatives. Upon finalizing its proposed route in consultation with the agencies noted above, Transco proceeded to obtain a significant amount of sampling data to characterize the concentration of contaminants in sediments, again in consultation with the agencies. Neither the consulting agencies nor the FERC staff required Transco to obtain similar detailed data from the alternative routes, and we decline to do so here. We also reiterate that cost is typically not a major factor in our alternatives review. Finally, we note that, contrary to comments, the comparison of route alternatives did consider impacts on hard clam, surf clam, and other shellfish areas.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
ALT-7	The NPS concurred with the conclusion in the draft EIS that Alternative 5 is not recommended, primarily because the alternative would cross the Gateway National Recreation Area. Further, the NPS stated that the proposed route, and Alternatives 2, 3, and 4 would be unlikely to affect or impact the Gateway National Recreation Area and its resources.	Comment noted.
ALT-8	The NJDEP suggested that an offshore alternative route be selected that would avoid areas where scouring could occur, because mobile fishing gear could be lost to entanglement with the pipeline in areas where significant scouring may be an issue.	Raritan Bay Loop Route Alternatives 1 and 2 were eliminated from consideration in part due to long-term integrity concerns associated with the northward erosion of the Sandy Hook Channel. Based on Transco's consultations with the USACE, the Raritan Bay Loop would be installed with a minimum of 4 feet of cover, and Transco would monitor the right-of-way during operation to ensure adequate cover is maintained.
ALT-9	Regarding offshore installation alternatives, the NYSDEC commented that the final EIS should include that the dredging of Class C material should be conducted using an environmental bucket and no barge overflow, and that Transco should use these best management practices in Class C sediment areas during installation, including at MP 25.4 where mercury concentrations exceed Class C concentrations in the 3 to 6-foot layer.	Transco has agreed to utilize an environmental bucket at all locations where clamshell dredging would occur and would also prevent scow overflow in areas where Class C sediments are removed. Transco specifically modified its original construction method between MPs 25.2 to 25.6 at the request of NYSDEC to install the pipeline using an environmental clamshell dredge rather than a jet trencher.
ALT-10	The NYSDEC commented that additional information should be provided to justify the statement that a subsea plough is less environmentally friendly and cannot reach the depth of installation. Further, the NYSDEC commented that, because the proposed jet trencher method would require two passes to install the pipeline, could a subsea plough be configured to install the pipeline with more than one pass.	Since issuance of the draft EIS and in response to a request from the NYSDEC, Transco has agreed to utilize an environmental clamshell during all excavation where a clamshell is proposed, substantially reducing turbidity and sedimentation in those areas. In areas where a jet trencher is proposed, section 3.6 of the EIS explains that a subsea plough proceeds at a substantially slower rate than a jet trencher and results in a 30-foot-wide trench with material being side-cast, whereas a jet trencher fluidizes sediment within a 9-foot-wide area with the great majority remaining in the disturbed area. Section 3.6 has also been revised to note that Transco does not anticipate the need to use supplemental backfill where the pipeline is installed by jet trencher, whereas supplemental backfill would be needed if a subsea plough is used.
ALT-11	The NYSDEC commented that additional analysis should be completed to determine if excavated material proposed for disposal at the HARS would be suitable for use as backfill material. The NYSDEC further stated that the re-use of clean material as backfill should be a priority over borrowing from other offshore areas	The final EIS has been updated to include additional sediment sampling conducted by Transco in 2018, in consultation with the NYSDEC, NJDEP, and USACE. The sampling was conducted to further characterize dredge material for possible disposal at the HARS, if approved by the USACE. Transco proposes to dispose of dredge material that is not suitable for disposal at the HARS,

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	outside the Project boundaries (i.e., the Jamaica Bay Entrance Channel site).	including Class C sediments in New York waters, at an approved onshore facility in New Jersey. Transco is considering side-casting dredge spoil at two locations in New York waters, but would only do so if approved by the NYSDEC. Transco is no longer planning to conduct dredging of supplemental backfill, but instead would acquire backfill from a vendor already permitted by the USACE to dredge the Ambrose Channel, thereby avoiding additional impacts that would have been associated with project-specific backfill dredging.
ALT-12	Comments related to alternatives to Compressor Station 206, including that the station should be cited in a remote area; the size (i.e., horsepower) of the compressors are excessive; that looping the existing system between Compressor Stations 205 and 207 would be a preferred alternative, and that our analysis should consider potential impacts on climate change from the various alternatives. Commenters also contend that our analysis of electric motor-driven compressors was not adequate, specifically that we did not compare emissions from natural gas-fired turbines and electric motor-driven compressors. Commenters also state that we should consider a heat recovery system that would reduce heat emissions and associated impacts, as well as provide electric power to power electric motor-driven compressors.	Section 3.2.2.2 evaluates various combinations of looping and compression increases at existing stations that could potentially avoid construction of proposed Compressor Station 206; section 3.4 evaluates alternative locations for Compressor Station 206; section 3.5 evaluates the potential use of electric motor-driven compressors at the station; and waste heat recovery is considered in section 4.10.1.7. These sections of the EIS describe the process we undertook to evaluate these alternatives and explain how, based on our experience and professional judgement, we balanced the impacts of each alternative on natural and human resources to arrive at our recommendations.
ALT-13	Comment that the alternatives analysis and need for Compressor Station 206, including the potential for Compressor Station 205 to be a viable alternative, cannot be fully reviewed by the public because certain information was filed as CEII.	Section 3.2.2.2 evaluates various combinations of looping and compression increases at existing stations that could potentially avoid construction of proposed Compressor Station 206, including the potential expansion of Compressor Station 205. As explained in the EIS, we requested that Transco provide the hydraulic modeling used to site the proposed facilities and evaluate Transco system alternatives. Although this data is considered CEII, we independently reviewed this information and found it acceptable for our analysis.
ALT-14	One commenter contends that the placement of Compressor Station 206 along Transco's existing system is not justified because of the distance between it and existing Compressor Station 205. The commenter further states that Compressor Station 205 could be expanded to meet the project purpose.	See response to ALT-13.
ALT-15	Commenter contends that an alternative site for Compressor Station 206 should be selected that would reduce forest impacts, based on previous permitting decisions by the NJDEP regarding long-term impacts on forested vegetation and habitat.	Impacts on forest resources was one of the factors we considered in our evaluation of Compressor Station 206 site alternatives. As explained in section 3.0, we applied our experience and professional

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
		judgement in balancing the impacts of each alternative on numerous natural and human resources to arrive at our recommendations.
ALT-16	<p>Commenter asserts that the FERC improperly assessed wetland impacts associated with Compressor Station 206 site alternatives, focusing on minimization and mitigation rather than avoidance. The commenter also asserts that the method used to quantify wetlands in evaluating Compressor Station 206 site alternatives was inconsistent with the results of field wetland delineation data presented in section 4.3.4.1 and that approval of proposed Site 3 would not comply with the CWA or New Jersey's Freshwater Protection Act FWPA as the use of other alternatives would result in less wetland impact. The commenter further suggests that a combination of parcels would reduce wetland impacts as well as move the compressor station further from residences.</p>	<p>As explained in section 3.4.1, one of the preliminary factors used to evaluate sites under consideration was the presence of wetlands. Preliminary review of 39 sites identified 17 sites for further assessment. Based on NJDEP wetland data, 12 of the 17 sites were eliminated from further review because none possessed sufficient, contiguous upland area to accommodate the minimum construction or operational footprint of the compressor station. In the more detailed assessment of potential impacts on wetlands at the five remaining sites under consideration, the EIS explains that we located the compressor station, access road, and tie-in pipelines at each site to minimize impacts on wetlands and waterbodies. Thus, contrary to the commenter's view, the primary wetland strategy in the review of alternative sites for Compressor Station 206 was avoidance. The commenter also contends that the five remaining sites were shortlisted first for additional assessment when, in fact, the five sites were identified last through the phased review process.</p> <p>As explained in the introduction to section 3.0, we utilized the same source of information to normalize the comparison of alternatives. Thus, we did not compare wetland delineation data to desktop data. Rather, for Compressor Station 206, Transco utilized a sophisticated remote sensing process to estimate the presence of wetlands on select sites which we found acceptable for comparative purposes. We also assumed the same area for the compressor station on each site and placed the facility, access road, and interconnecting pipeline to avoid wetland impacts to the extent possible, resulting in a fair comparison between alternatives. The resulting wetland impacts for each site are disclosed in the EIS, along with other comparative factors including proximity to residences, a substantive concern to the surrounding community. As explained throughout our alternative analysis, we applied our experience and professional judgement in weighing all the factors, including wetland impacts, in arriving at our recommendations. As discussed in section 4.3.4.1, Transco would be required to obtain and comply with all federal permits, including under the CWA, prior to commencing construction.</p> <p>As noted above and discussed in the EIS, we initially considered 39 individual parcels as possible sites for Compressor Station 206, representing a comprehensive review of possible sites within the</p>

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		siting envelope. Thus, we decline to consider possible combinations of these parcels as additional alternatives.
ALT-17	A member of the Franklin Township Council requested that the existing EPA road be used as the permanent access road to Compressor Station 206. The commenter further noted that the landowner stated they would prefer the EPA road be used and stated that, as the township Councilmember representing the area, he believed he could address the current restriction on use of the land.	Comment noted. Section 3.4.2 of the EIS explains our reasons for concluding that extension or modification of the existing EPA access road would not provide a significant environmental advantage over Transco's proposed access road to the site and, therefore, is not recommended. Additionally, expansion of the existing EPA road is not possible due to a Deed of Easement that prohibits any development of the land for nonagricultural purposes.
ALT-18	One individual provided comments on the electric motor-driven (EMD) compression alternative. The commenter stated that the analysis did not discuss the option of upgrading the existing high-voltage powerline along Route 27, and further stated that the text referring to the need for a total annual electric energy demand of 192,720 MW was inappropriate because a megawatt is a unit of energy, not a unit of power. In addition, the commenter stated that the discussion of NOx emissions in our analysis should include the potential for contracting for renewable power, which the commenter states would eliminate all emissions.	Whereas Transco could potentially obtain the electricity needed to power the EMD Compression Alternative by upgrading existing facilities in the area or routing new electric service along a different path than considered in section 3.5, the primary advantage of the EMD Compression Alternative is that it would avoid local air emissions. However, as detailed in section 3.5, the EMD Compression Alternative would result in greater regional emissions due to the mix of primary energy sources used to generate electricity in the region. The EIS has been corrected to indicate that the EMD Compression Alternative would result in 192,720 megawatt-hours of annual electric energy demand. As explained in the introduction to section 3.0, because renewable energy sources are not natural gas transportation alternatives, they were not considered in our analysis.
Geology		
GEO-1	General comments regarding geological resources, including the presence of bedrock at the Compressor Station 206 site.	As described in section 4.1.2.1, geotechnical soil borings identified 5 to 15 feet of clay, clayey sand, sand, and gravel overlying igneous bedrock. Transco does not anticipate the need for blasting as building foundations are designed to remain above the bedrock surface.
GEO-2	Comments related to impacts on the Project facilities from earthquakes, including seismic events that could result from blasting or wastewater disposal from gas extraction activities. In addition, one commenter expressed concern regarding movement along the Appalachian Prong and subsequent impacts on the Raritan Bay Loop.	Section 4.1.4.1 discusses the frequency and magnitude of historic seismic events in the Project area as well as the potential for significant seismic activity to occur in the future, based on USGS data. The EIS notes that the predicted seismic activity for the area would not pose a risk to the Project facilities as they would be constructed in compliance with modern engineering design and applicable DOT standards.
GEO-3	One commenter expressed concern regarding the potential for man-made sinkholes to affect Compressor Station 206. In addition, Chester County, Pennsylvania stated that areas along the US	Compressor Station 206 is underlain by hard, igneous bedrock near the land surface, which is not susceptible to sinkhole development.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	Route 30 corridor in proximity to Compressor Station 200 have experienced issues with sinkholes developing as a result of an HDD installation of another pipeline.	The draft EIS included a recommendation that Transco further evaluate the potential for karst activity to impact the proposed expansion of Compressor Station 206. Transco provided this information which we found acceptable. The EIS has been revised to include the additional investigation results and provides mitigation measures that Transco has committed to implement to minimize the potential for karst activity to affect the facility.
GEO-4	The NJDEP – New Jersey Geological Survey commented that the Global Sanitary Landfill between approximate MPs 10.1 and 10.4 of the Madison Loop is on marsh sediments with poor load bearing characteristics and expressed concern regarding slope movement of the landfill that could be caused by construction of the pipeline. The NJDEP recommended that monitoring equipment be placed along the pipeline-landfill boundary to monitor any slope movement.	The Madison Loop would be constructed within Transco's existing LNYBL Loop C right-of-way which abuts the landfill boundary for approximately 500 feet near MP 10.4 and, thus, the potential for Project construction to initiate slope failure in the landfill is low. Transco would construct the pipeline in accordance with its Plan and Procedures which are designed to minimize erosion and control water that may be encountered during construction, further minimizing the potential to initiate slope failure. The construction workspace would also be inspected on a daily basis and any indications of slope failure in this location or elsewhere would be addressed.
GEO-5	One commenter stated that recent severe weather events should be included in our analysis of potential impacts on Compressor Station 206, including winter storms, heavy rain storms, and strong winds that occurred within the previous year.	Section 4.1.4.4 discusses the frequency and magnitude of extreme storms in the Project area, and specifically references Hurricane Sandy which struck the area in 2012 and concludes that there is a high probability for the area to continue to experience severe weather. The EIS discusses the potential impact of severe weather on the proposed facilities, and in particular Compressor Station 206 which is 18 miles inland from the Atlantic coast and explains that these effects would be mitigated by designing and constructing the facilities in compliance with applicable standards that take into account predicted storm effects including high winds and flooding.
GEO-6	The NJDEP – New Jersey Geological Survey provided comments clarifying the geologic formations and paleontological resources in the Madison Loop and Raritan Bay Loop area.	The EIS has been revised to incorporate the clarifications and other information provided by the New Jersey Geological Survey and reference that Transco would implement its Unanticipated Discovery Plan for Paleontological Resources, which we conclude would be protective of fossil resources that may be encountered during construction.
Soils		
SOIL-1	One commenter asked about the success of the general mitigation measures to reduce impacts on prime farmland. In addition, the commenter stated that our analysis of prime farmland did not	Section 4.2.1.1 and 4.2.1.3 have been revised to include additional discussion of prime farmland.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	indicate the current use of the land (agricultural or some other land use), and how the Project could affect that use.	
SOIL-2	One commenter asked about the success of the proposed mitigation measures that would be implemented if contaminated soils are encountered.	Section 4.2.1.3 has been revised to include a discussion of measures that Transco would implement if contaminated soils are encountered.
SOIL-3	The NJDEP and others commented that the discussion in section 4.2 (Soils) did not address the potential for acid soil conditions to be encountered. The NJDEP also noted that the Magothy Formation contains geologic conditions that could contribute to the production of acid soils, which could runoff and affect the surrounding vegetation, wetlands, and adjacent soils. In addition, the NJDEP commented that Transco should revise its Project-specific Plan to address acid soils, if encountered.	Section 4.2.1.3 has been revised to include a discussion of acid forming soils.

Groundwater

GW-1	General comments related to groundwater impacts, including impacts on private wells.	Section 4.3.1.8 includes a detailed discussion of the potential impacts that construction and operation of the Project could have on groundwater resources, including water supply wells, and explains that measures that Transco would implement to avoid or minimize impacts, which we conclude would be protective of groundwater resources and wells. Section 4.3.1.8 includes our recommendation that any Order that may be issued by the Commission require Transco to file a final table identifying field-verified wells and springs within 150 feet of the Project prior to construction.
GW-2	Comments regarding potential impacts on groundwater resources at Compressor Station 206, including aquifers/drinking water sources and impacts from the run-off of pollutants. In addition, commenters contend that no measures have been identified to mitigate contamination from Compressor Station 206 on underlying aquifers that provide drinking water to nearby communities.	Section 4.3 describes existing groundwater conditions at the Compressor Station 206 site, noting that the site is within the EPA-designated Northwest New Jersey sole source aquifer, which encompasses over 1,735 square miles. Locally, however, the compressor station site is underlain by diabase bedrock, which the NJDEP indicates is a low yielding aquifer. In addition, groundwater in the immediate area of the site has been affected by contaminants emanating from the Higgins Farm Superfund site, and area residents are connected to municipal water service. Section 4.3.1.8 explains that Project construction would pose a minimal risk to groundwater resources and describes the measures that would be implemented to further minimize risk. Regarding the potential risk to groundwater resources posed by operation of the facility, section 4.3.1.8 describes the construction and operation of systems specifically designed to contain hazardous substances at the compressor

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		station, and notes that the facility would be subject to inspection by fire officials. We also clarify some commenter's misunderstanding that the NESE Project, including Compressor Station 206, would convey oil or another liquid product. The NESE Project would convey natural gas which, if released, would not pose a significant risk of contamination. For these reasons and as more fully explained in the EIS, we conclude that construction and operation of Compressor Station 206 would not pose a significant risk to groundwater. Similarly, construction and operation of the compressor station would not pose a significant risk to surface water resources in the area, including Carter's Brook.
GW-3	Comments related to encountering contaminated groundwater during construction (specifically along the Madison Loop).	The potential to encounter contaminated groundwater during construction is referenced in section 4.3.1.6 and sites with documented contamination in proximity to the NESE Project are detailed in section 4.7.8. As recommended in the draft EIS, Transco subsequently filed a Materials and Waste Management Plan which further details the sites with documented contamination near the Madison Loop and describes how Transco would recognize and manage contaminated soil and groundwater on a tract-by-tract basis, as well as how HDD drill cuttings and fluids would be managed. We find that implementation of this plan would ensure that pre-existing contaminated media encountered during construction would be properly managed.
GW-4	Commenters expressed concern regarding the potential for groundwater to be contaminated at the Compressor Station 206 site, and state that the site has a high water table. In addition, the commenters expressed concern that the contamination could subsequently affect Carters Brook.	See response to GW-2.
GW-5	Comments related to the Higgins Farm NPL Superfund site. Specifically, commenters identified concern regarding the potential for blasting at the Trap Rock Quarry, combined with potential impacts during construction of Compressor Station 206, could impact the contamination at the Higgins Farm site. Commenters also expressed concern regarding changes in runoff patterns that could affect the contamination plumes at the site. Commenters state that there is no data about potential contamination plumes at the compressor station site because the EPA monitoring wells were located elsewhere on the Higgins site. Commenters request that FERC review the EPA's 2018 5-year review of the Higgins Farm NPL site remediation efforts, and state that the draft EIS should be	Section 4.3.1.6 includes a detailed review of groundwater contamination emanating from the Higgins Farm Superfund site, including the magnitude and extent of groundwater contamination, based on the most recent data available from the EPA, released in September 2018. As disclosed in the EIS, the EPA is actively remediating groundwater at the Higgins Farm Superfund site through a system of extraction wells, which have been effective in controlling contaminant migration. Also, as discussed in section 4.3.1.6, the water table occurs at an approximate depth of 30 feet at the compressor station, well below any Transco excavation or grading, including for the access road. As stated in the EIS, the EPA assisted in preparing the EIS and finds that construction and

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	reissued for public comment after review of the EPA's data on the Higgins site. Some commenters also state that the EIS should analyze potential impacts of contamination at the site near the proposed access road to Compressor Station 206.	operation of the compressor station is unlikely to affect EPA's remedial actions.
GW-6	<p>Many commenters expressed concern regarding whether the planned upgrades to the municipal water system near Compressor Station 206 would provide adequate water supply in the event of a fire at the facility. The NJDEP also requested that Transco provide a letter of intent from Franklin Township confirming that the upgrade would provide adequate supply to the station, and if the upgrades are not sufficient, that Transco identify alternative plans to obtain sufficient water to ensure public safety. The EPA also commented that an alternative to the municipal water supply should have been discussed in the draft EIS in the event Franklin Township does not complete the upgrades prior to the compressor station going into operation.</p> <p>Some commenters also expressed concern related to Transco's planned septic system at Compressor Station 206, including the need for the public to have adequate time to comment on the plan.</p>	<p>As discussed in section 4.11.4, the likelihood of a significant incident at Compressor Station 206 that would threaten public safety is low as the facility would be designed, constructed, operated, and maintained with modern engineering practices and DOT safety standards. DOT would also be responsible for safety of the facility throughout its operating life.</p> <p>Since issuance of the draft EIS, Transco indicated that a fire hydrant would not be necessary at the station as the most effective and immediate way to begin to address a natural gas fire is to shut off the gas source, which would be accomplished by an automated emergency shutdown system at the facility. In the unlikely event of a serious fire, the open, maintained area surrounding the facility would act as a fire break, reducing the risk to surrounding property. Section 4.11.1 also discusses how Transco would coordinate with local first responders to review emergency response plans, provide on-site training and simulated emergency exercises, and support any emergency response actions.</p> <p>Concerning an alternative water supply to the facility, Transco indicated that a temporary potable water tank or water well would be installed at the site to provide drinking water and water for sanitation purposes if the planned upgrades to the municipal system are not completed in time for facility operation.</p> <p>The planned septic system at the site would be designed, constructed, and operated in accordance with applicable regulations and, therefore, would not pose a risk to groundwater quality in the area.</p>
GW-7	Comments regarding stormwater runoff and the potential for run-off pollutants to contaminate groundwater and nearby surface waters. In addition, comments that tree/forest removal will reduce the amount of stormwater and pollutants that are absorbed by forested land. In addition, commenters contend that the Compressor Station 206 site fails to satisfy the minimum design standards of the Stormwater Best Management Practices (BMP) manual for infiltration basins and that due to the design the site would be	See response to comment GW-2.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	considered a dam in accordance with N.J.A.C. 7:20, the New Jersey Dam Safety Regulations.	
GW-8	Regarding the identification of public and private supply wells or springs within 150 feet of the Project area, the NJDEP also provided comments asking how this distance was determined sufficient to protect human health, and stated that Transco should provide well depth and construction information for wells listed in table 4.3.1-2.	Our review of wells and springs within 150 feet of Project construction is protective of those resources based on our experience in monitoring the environmental effects of pipeline construction throughout the United States which involves temporary, shallow, excavations, and considering that spill prevention practices and construction and restoration measures that would be implemented to further avoid and minimize impacts on resources. Section 4.3.1.8 includes our recommendation that any Order that may be issued by the Commission require Transco to file a final table identifying field-verified wells and springs within 150 feet of the Project prior to initiating construction.
GW-9	Regarding pre-existing contaminated groundwater that Transco identified within 0.25 mile of the Project and the measures Transco would implement if unexpected pre-existing contamination is encountered, the NJDEP also commented that, because Transco identified wells within 150 feet of the Project work areas, impacts of unanticipated contaminated groundwater on wells beyond 150 feet are not discussed. The NJDEP further commented that Transco's dewatering activities could change groundwater flow paths, which could impact wells that have not been identified by Transco (and as such would not be monitored by Transco).	See response to comment GW-8 and section 4.3.1.8. Construction and operation of the Project would not pose a significant risk to groundwater quality, hydrology, or nearby wells.
GW-10	The NJDEP commented that well monitoring should occur at distances greater than 150 feet because Transco has not identified how much bentonite could be lost in the event of an inadvertent release of HDD drilling fluid or how far a release could migrate during construction.	See response to comment GW-8 and section 4.3.1.8. No wells were identified within 150 feet of the proposed onshore HDDs and, given the urban setting near the Madison Loop which is served by municipal water service, it is unlikely that private drinking water wells are in proximity to the proposed HDDs. Section 4.3.1.8 explains the non-toxic composition of HDD drilling fluid and describes the measures that Transco would implement to avoid and minimize HDD drilling fluid loss which, based on our experience, would be protective of groundwater resources and wells.
GW-11	The NJDEP commented that Transco would be required to confirm whether any trench dewatering, changes to recharge rates, or groundwater quality impacts would negatively affect wellhead protection areas along the Madison Loop.	Comment noted.

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Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
Surface Waters		
SURF-1	Comments related to potential contamination of drinking water and surface waters that provide drinking water (including Carter's Brook and the Delaware and Raritan Canal).	Potential impacts on public surface water intakes and mitigation measures to reduce impacts are discussed in section 4.3.2.7.
SURF-2	General comments regarding impacts on surface waters near Compressor Station 206, including concerns regarding impacts on water quality. Commenters also expressed concern regarding impacts of pipeline leaks on surface water quality. One commenter also expressed concern regarding the potential for water used in firefighting efforts to run off and contaminate nearby surface waters.	Section 4.3.2.7 discusses measures that Transco would implement to reduce potential impacts on surface waters near the Project, including Compressor Station 206.
SURF-3	The Chester Water Authority provided comments regarding notification requirements in the event of a spill within watersheds in Lancaster and Chester Counties during construction and operation of the Project.	Section 4.3.2.7 has been revised to include a discussion of the notification requirements identified by the Chester Water Authority. We expect that these requirements would be addressed during the appropriate local permit reviews and approvals.
SURF-4	Regarding the Muddy Run Reservoir, the EPA recommended coordination between the PAFBC and Execlon staff to ensure hydrostatic test water withdrawals do not affect trout stocking or recreational activities.	Transco no longer plans to use the Muddy Run Reservoir as the water source for hydrostatic testing, dust control, and wash stations for the Quarryville Loop. Section 4.3.2.6 has been revised to address this change.
SURF-5	General comments regarding water quality impacts along the Raritan Bay Loop, including comments that the analysis in the draft EIS was insufficient. In addition, one commenter expressed concern that the operating pipeline would increase the water temperature in Raritan Bay.	Section 4.5.2.8 provides a discussion of impacts and mitigation on aquatic resources and habitat from potential water quality impacts along the Raritan Bay Loop. Given the extensive area of Raritan Bay compared to the relatively small size of the proposed offshore pipeline, any change in water temperature would be minor.
SURF-6	Comments regarding inadvertent releases of HDD drilling fluid during construction of the Raritan Bay Loop, including a comment that Transco would respond to an inadvertent release by monitoring "the leak while it continues to spread, stopping it only once it reaches excessive levels. Their contention is that the fluid will quickly dissipate, even in the event of plumes forming. Finally, while the drilling fluid can itself be relatively benign, any additives used can contain unknown toxins that will render the fluid hazardous."	As discussed in sections 2.3.3.5 and 4.5.2.8, Transco would implement its Offshore Horizontal Directional Drill Contingency Plan, which includes the construction procedures that would be implemented to reduce the potential for an inadvertent release to occur during drilling, and the measures that would be undertaken in the event of an inadvertent release.
SURF-7	The NYSDEC commented "[p]lease either delete or clarify the intent of the statement in Section 4.3.3.1 that says, "Class SA and SB waters are not considered high quality by the NYSDEC"."	Section 4.3.3.1 has been revised to clarify that no waterbodies within the Raritan Bay Loop are designated as high quality by the NYSDEC.

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Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
SURF-8	The NYSDEC and others commented on Class C sediments in Raritan Bay. Specifically, the NYSDEC that "Class C sediment contaminants of concern have not been modeled for water column concentration at the edge of the mixing zone. This section should be modified to include the requirement to model contaminant concentrations at the edge of the mixing zone and compare the results to the promulgated NYS water quality standards. NYS will require contaminant monitoring and compliance with specific permit limits at the edge of the mixing zone. This would likely be included as conditions to any WQC for the NESE Project."	Comment noted. We expect that specific monitoring and compliance requirements would be reviewed and included as part of the appropriate state authorizations.
SURF-9	General comment the 500-year flood zone should be used to assess the safety of the Compressor Station 206 site instead of the 100-year floodplain.	Comment noted. The Compressor Station 206 site is about 1,000 feet downstream from the headwater of Carter's Brook. Flood hazard mapping available on the Franklin Township website indicates no 500-year flood plain in the upper reaches of the brook, but depicts very localized 500-year flood zones approximately 1 mile downstream from the compressor station site.
Wetlands		
WET-1	Comment that the HDD method should be used to further reduce impacts on wetlands.	As discussed in section 4.3.4.3, construction and operation of the Project would temporarily and permanently affect 12.5 and 3.9 acres of wetlands, respectively. Transco has routed the onshore pipeline facilities to avoid wetlands to the extent practicable, including collocating the pipeline loops with Transco's existing right-of-way for 98 percent of their length. We conclude in the EIS that implementation of Transco's Project routing, workspace design, and construction methods would avoid impacts on wetlands to the extent practicable, and constructing the Project in accordance with Transco's Procedures and other plans, direct and indirect wetland impacts would be minimized, and most impacts would be minor and temporary or short-term.
WET-2	Comment regarding wetland impacts, and that wetland mitigation plans should be finalized before a decision is made whether to approve the Project.	As discussed in section 4.3.4.3, In Pennsylvania, the USACE Baltimore District issued its Section 404 permit on May 29, 2018 and determined that no mitigation was required for wetland impacts associated with the Quarryville Loop, and on October 26, 2017 the PADEP issued an Administrative Jurisdictional Determination indicating that a wetland permit was not required for Transco's proposed activities at Compressor Station 200. In New Jersey, the USACE New York District does not require compensatory mitigation for Project-related wetland impacts under its jurisdiction (see section 1.2.3), but Transco is continuing to consult with the NJDEP

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Comments on the Draft EIS and Draft General Conformity Determination and Responses		
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		regarding potential mitigation for wetland impacts under its jurisdiction. Transco, in consultation with the NJDEP, would prepare a Project-specific wetland mitigation plan to maintain no net loss of wetlands and to adequately replace lost functions. As a part of the federal and state permitting processes, written approval of the mitigation plan would be obtained from the USACE and appropriate state agencies prior to construction. As further recommended in section 5.2, Transco would be required to obtain all federal authorizations before a notice to proceed with construction is issued.
WET-3	General concerns related to forest removal at the Compressor Station 206 site, including concerns regarding loss of wildlife habitat and that tree removal would affect air quality and wetland value.	As required by our Procedures, Transco sited the compressor station itself to avoid construction and operation of Compressor Station 206 within wetlands, but wetland impacts could not be completely avoided by the access road or inlet and outlet pipelines due to the extent of wetlands between the facility and Transco's existing pipeline system and land use limitations near the access road, including residences and the Higgins Farm Superfund site to the north, and the active Trap Rock quarry to the south. See also the response to comment WET-1.
WET-4	Comments expressing concern regarding the workspace for the Lockwood Marina HDD entry site, which is located within a wetland and adjacent to a waterbody, and the potential impacts associated with inadvertent releases of drilling fluid.	As discussed in section 4.3.4.3, Transco would implement the measures in its Onshore Horizontal Directional Drilling Contingency Plan, which details the potential for an inadvertent release of drilling fluid to occur; explains the drilling practices that would be implemented in the event of an inadvertent release; and describes the measures that would be undertaken, in consultation with the appropriate regulatory agencies, if drilling fluid was to impact a wetland. We have reviewed Transco's plan and find the measures to be acceptable.
WET-5	Comment that the Cheesequake Road HDD work area includes a considerable portion of the wetland impacts associated with the Madison Loop, and that the temporary workspace associated with the HDD and associated access road could be reduced to reduce impacts on wetlands. In addition, comments that the amount of wetland impacts was excessive, and provided suggestions for areas where workspace could be reduced to reduce impacts on wetlands. The commenter also expresses concern regarding impacts on forested wetlands and the length of time it would take these areas to restore to preconstruction conditions. The commenter further contends that avoidance of forested wetlands should form "the basis for decision making relative to wetland permit compliance."	See the response to comment WET-1.

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Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
WET-6	Comment regarding restoration of wetland resources on steep slopes. The commenter also stated that the EIS lacked detail to inform the conclusions regarding restoration, and that referencing Transco's commitment to restore disturbed areas in accordance with its Plan and Procedures is insufficient.	We disagree. Potential impacts on wetlands and the measures Transco would implement to reduce impacts are discussed in section 4.3.4.3. Based on these measures, we conclude that construction and operation of the NESE Project would not result in significant impacts on wetland resources. See also the responses to comments GEN-21 and GEN-22.
Vegetation		
VEG-1	Comment regarding wetland impacts, and the impacts of tree removal at the Compressor Station 206 site. In addition, commenters expressed opposition to the amount of tree removal and wetland impacts, concerns regarding loss of wildlife habitat, and concern that the removal would decrease the number of trees that are removing carbon dioxide from the atmosphere.	Section 4.5.1.1 describes the impacts that the removal of trees associated with Compressor Station 206 could have on wildlife. As discussed in this section, we conclude that the decrease in trees associated with Compressor Station 206 and the resulting decrease in carbon dioxide removal from the atmosphere would not be significant.
Wildlife		
WILD-1	General comments regarding Project impacts on wildlife and wildlife habitat (including forest habitat), including comments that the level of impacts would be unacceptable.	The EIS was prepared in accordance with NEPA, CEQ guidelines, and other applicable requirements. The EIS is consistent with FERC style, formatting, and policy regarding NEPA evaluation of alternatives and different types of impacts, including wildlife impacts for a linear "corridor-type" project. Further, the appropriate state and federal agencies have been given the opportunity to identify concerns related to significant impacts to wildlife and listed species in the project area. Transco has conducted surveys for federal and state-listed species based on those consultations, and has committed to various conservation measures to minimize impacts to general wildlife and listed species. Based on the results of those consultations and surveys, and Transco's proposed mitigation measures, we believe wildlife mortality as a result of the Project would not be significant.
WILD-2	Comments on the adequacy of wildlife and habitat surveys, including that additional surveys should be completed. In addition, one comment requested that impact avoidance and minimization measures be implemented during construction and for the life of the Project, and that the surveys include both the proposed Project as well as potential new pipeline routes.	The EIS was prepared in accordance with NEPA, CEQ guidelines, and other applicable requirements. The EIS is consistent with FERC style, formatting, and policy regarding NEPA evaluation of alternatives and different types of impacts, including wildlife impacts for a linear "corridor-type" project. Further, the appropriate state and federal agencies have been given the opportunity to identify concerns related to significant impacts to wildlife and listed species in the project area. Transco has conducted surveys for federal and state-listed species based on those consultations, and has

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
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		<p>committed to various conservation measures to minimize impacts to general wildlife and listed species. Based on the results of those consultations and surveys, and Transco's proposed mitigation measures, we believe wildlife mortality as a result of the Project would not be significant.</p> <p>The primary impacts on wildlife would be during construction of the Project. Avoidance and minimization measures such as conducting maintenance vegetation clearing outside of nesting season and downcast/minimized lighting at Compressor Station 206 would be implemented during the life of the Project. However, potential new pipeline routes are not evaluated as part of this EIS and therefore Transco did not survey these routes as part of the NESE Project. Future pipeline projects would be evaluated individually in future applications to FERC.</p>
WILD-3	Regarding table 4.5.1-1, the NJDEP, Division of Fish and Wildlife commented that the timing restriction (no in-stream work allowed for Cheesequake Creek and any Unnamed Tributary to Cheesequake Creek should be 3/1 to 7/31, due to the confirmed runs of anadromous (river herring) in Cheesequake Creek.	<p>Transco provided the following response to this comment on June 1, 2018:</p> <p>Per New Jersey's Freshwater Wetland Protection Act rules at New Jersey Administrative Code (N.J.A.C.) 7:7A (Table 5.7) and Flood Hazard Area Control Act rules at N.J.A.C. 7:13 (Table 11.5), the restricted time period for working in waters supporting both general game fish and anadromous fish crossed by the Madison Loop (i.e., freshwater, non-trout, saline estuarine waters) is April 1 through July 1. Transco will coordinate directly with the NJDEP to confirm whether or not there has been a change to the specified restriction.</p> <p>Transco is coordinating with the NJDEP to determine the proper timing restriction for saline estuarine waterbodies.</p>
WILD-4	Comments on impacts on sensitive wildlife habitat areas, including Important Bird Areas (IBA). Specifically, commenters expressed concerns regarding impacts on the Raritan Bay and Sandy Hook Gateway National Recreation Area (which is an IBA), and the Sourland Mountain Region IBA). Commenters also expressed concern regarding the Delaware and Raritan Canal, which is a linear IBA.	Potential impacts on IBAs are discussed in section 4.5.1.2 of the EIS.
WILD-5	Commenters stated that the draft EIS did not adequately analyze project impacts on Jamaica Bay, including impacts on wildlife and wildlife habitat, and migratory birds, as well as a wildlife refuge within Jamaica Bay.	Section 4.5.1.2 of the final EIS has been updated to address this comment.

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WILD-6	The NJDEP, ENSP requested the basis for determining the significance/insignificance of the loss of an individual to a local population in order to complete its review.	The EIS was prepared in accordance with NEPA, CEQ guidelines, and other applicable requirements. The EIS is consistent with FERC style, formatting, and policy regarding NEPA evaluation of alternatives and different types of impacts, including wildlife impacts for a linear "corridor-type" project. Further, the appropriate state and federal agencies have been given the opportunity to identify concerns related to significant impacts to wildlife and listed species in the project area, including the NJDEP. Transco has conducted surveys for federal and state-listed species based on those consultations, and has committed to various conservation measures to minimize impacts to general wildlife and listed species. Based on the results of those consultations and surveys, and Transco's proposed mitigation measures, we believe wildlife mortality as a result of the Project would not be significant.
WILD-7	The NJDEP, ENSP provided comments regarding construction timing restrictions, stating that it agreed that clearing vegetation should be avoided from April 1 through August 31 to minimize harm to migratory songbirds; clearing trees greater than or equal to 5 inches diameter at breast height from October 1 through March 31 to minimize harm to Indiana bats; and limiting speeds for aquatic vessels that are 65 feet or larger to 10 knots from November 1 through April 30 to protect Right whales. In addition, the NJDEP, ENSP agreed that vehicle and equipment traffic should be limited to no more than 15 mph, and that construction activities should be conducted during daylight hours to the extent practicable. Regarding Northern long-eared bats, the NJDEP, ENSP also requested that Transco voluntarily extend the tree clearing restriction to the entire onshore Project length to minimize the risk of harm to these bats.	Comment noted. We expect that any specific requirements would be addressed in the appropriate state authorizations.
WILD-8	Comments related to noise impacts on wildlife from Compressor Station 206. Specially, the commenter expressed concern regarding low-frequency noise, which the commenter states can travel as far as 5 miles, and the subsequent effect on bird populations (e.g., mating call disruption). In addition, the commenter stated that the compressor station would produce constant noise and vibration, and that noise would be above allowable standards during blowdown events.	Potential impacts on wildlife due to noise associated with Compressor Station 206 are discussed in sections 4.5.1.1 and 4.10.2.2 of the EIS, with section 4.10.2.2 specifically addressing low frequency noise. We conclude that, based on the results of the noise analysis that Transco conducted, Transco's proposed noise mitigation measures, and the representative wildlife species near Compressor Station 206; in the years following initial construction, birds and other wildlife would either become habituated to the operational noise associated with the compressor station or move into similar available habitat farther from the noise source. As such, the effects on wildlife due to noise would be minimal and highly localized. Further, our recommendation that Transco provide post-

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		construction noise surveys would ensure that noise impacts on the surrounding area would comply with our regulations.
WILD-9	In a letter dated April 20, 2018, the New York State Department of Environmental Conservation notified Transco that its Water Quality Certification Application (submitted as part of its Joint Application) is denied due to incomplete information regarding the Project.	Comment noted.
WILD-10	The USFWS recommended revegetating the disturbed construction right-of-way with native wildflowers that would support honey bees, monarch butterflies, and other insect pollinators	Transco committed to revegetating areas disturbed by construction using seed mixes that are native to the region and benefit migratory birds and pollinators. Transco continues to coordinate with the FWS, NRCS, state resource management agencies, and soil conservation districts to identify seed mixes and practices to be used during construction to promote pollinator health and potentially provide a net benefit to pollinators in areas where pre-construction vegetation lacks pollinator habitat.
WILD-11	The EPA provided comments regarding mitigation for the loss of wildlife habitat and to extend the benefits of early-successional growth along the forested and open upland right-of-way in the Quarryville Loop. The EPA recommended consulting with the Lancaster County Conservation District to adopt conservation practices like those implemented under the Conservation Reserve Enhancement Program, such as the use of native grasses, habitat buffers for upland birds, and food plots. These conservation practices offer low ground cover for upland species, provide a food source, and reduce erosion, while also enabling safe pipeline operation. The EPA also recommended that where feasible, Transco replant using deer-resistant native shrubs and trees to assist regrowth and/or take protective measures given the overabundance of deer in this area that will destroy shoots of young trees and shrubs. Planting shrubs and trees also inhibit the growth of non-native and invasive species.	Section 4.5.1.2 has been revised and references section 4.4.4.1 which states that Transco would restore upland vegetation using seed mixes recommended by the Natural Resource Conservation Service, local agencies and organizations, or landowner agreement.
WILD-12	Comments related to potential impacts from high-temperature emissions from the exhaust stacks at Compressor Station 206. In addition, commenters expressed concern regarding the exhaust volume flow from the exhaust stacks, and potential impacts on the local environment. Commenters also contend that a revised draft EIS should be issued with a new comment period after we complete analysis of potential impacts from the exhaust stacks.	Section 4.5.1.1 of the draft EIS included a discussion of potential impacts associated with heat exhaust from Compressor Station 206 and has been revised to include additional information. Because the exhaust is vented to the atmosphere (unbounded), the stack exhaust would dissipate and the temperature would cool to ambient levels. The high-temperature, high-velocity exhaust would travel on an upward trajectory based on wind direction and speed and would be above ground level. Heat impact is anticipated to be minimal within a short distance from the stack exit, and negligible on local weather

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		patterns. Finally, in our experience, there have been no significant impacts associated with the heat from compressor station exhaust.
Aquatic Resources		
AQU-1	General comments regarding impacts on offshore aquatic resources, including impacts from noise during construction and Transco's proposed use of low-frequency sonar. In addition, some commenters state the analysis of impacts on benthic organism and marine mammal habitat was insufficient, asked how impacts would be mitigated, and contend the Project would be incompatible with federal regulations (e.g., the MMPA). Further, commenters contend that the impacts associated with offshore construction (including dredging, sedimentation, pile driving, etc.) would be excessive. Commenters also contend that our analysis lacked sufficient detail regarding impacts and mitigation measures, or that it should address whole ecosystem impacts within Raritan Bay.	Comment noted.
AQU-2	Comment regarding potential impacts from coatings on the offshore pipeline, specifically rust inhibitors. In addition, comments related to hydrostatic test water additives for the offshore pipelines. Further, commenters expressed concern that the draft EIS did not include an analysis of the specific chemicals that would be used. One commenter also stated that need for a State Pollutant Discharge Elimination System permit from New York State for the discharge of hydrostatic test water.	As discussed in section 2.1.1.1, the pipe would arrive with factory-applied external coating of fusion-bonded epoxy and concrete. Pipeline coatings are not expected to cause adverse impacts on aquatic organisms. Additives are discussed in section 4.5.2.8 and 4.5.3.2.
AQU-3	One commenter stated that the draft EIS was prepared without research or coordination with the NMFS to determine dredging impacts on contaminated sediments and marine wildlife.	The draft EIS was prepared in consultation with the NMFS Protected Species Division and Habitat Conservation Division, as well as state resource agencies, to assess potential impacts of the Project on aquatic resources and marine wildlife.
AQU-4	Potential for the Raritan Bay Loop portion of the Project to result in conditions conducive to the growth of harmful algal blooms.	A discussion of harmful algal blooms has been added to sections 4.5.2.2 and 4.5.2.8.
AQU-5	The NYSDEC commented that the draft EIS lacked sufficient detail on how impacts on Atlantic sturgeon and winter flounder would be avoided, specifically that additional information is needed to determine if activities that are proposed during aggregation, migration and spawning periods (including pre-lay dredge, hand jetting, pile driving, and use of a vibratory hammer) would adversely impact these species and result in an incidental take.	The updated time of year restrictions are discussed in section 4.5.2.8. As the timing restriction windows and allowable work have not been finalized for inclusion in the final EIS, Transco would be required to provide documentation of agency approval for timing restrictions and allowable work prior to construction, as required by the Procedures.

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Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
AQU-6	The FWS, New Jersey Field Office provided comments that it would defer to the NMFS for consultation pursuant to section 7 of the ESA and conservation measures to protect the federally listed (endangered) Atlantic sturgeon. In addition, the FWS, New Jersey Field Office commented that it would defer to the NMFS and NJDFG for comments and recommendations regarding propeller noise in the aquatic environment, disturbance to organisms on the bay floor, suspended sediments and turbidity, resuspension of contaminants in the bay's sediments, contaminants absorbed or ingested by biota, and notification to blue crab harvesters.	Comment noted.
AQU-7	Comment that the analysis of the four potential offshore backfill source sites is inadequate, including benthic community studies, sediment modeling, and chemical composition (including contaminants).	As discussed in section 4.5.2.8, Transco no longer plans to utilize the offshore backfill source sites. Rather, as discussed in section 2.3.3.10, Transco would obtain the necessary backfill from a vendor or vendors that have current permits from the USACE to dredge sediment from the Ambrose Channel for commercial applications. Sediment transport modeling results for Transco's proposed placement of supplemental backfill material is discussed in section 4.5.2.8.
AQU-8	Comments expressing concern regarding dredging methods and backfilling. Specifically, comments that the environmental impacts of backfilling the offshore portion of the Raritan Bay Loop have not been adequately analyzed, as well as the movement of backfill material (including contaminated sediments) within the water column. In addition, comments regarding disturbance of the substrate regardless of dredging method and resuspension of sediments, and expressing concern that dredge water handling methods were not discussed, and where dredged material will be dewatered prior to disposal.	Sediment transport modeling for backfilling activities is discussed in section 4.5.2.8. As stated in the section, Transco has secured a preliminary agreement with an upland disposal facility in New Jersey to accept all clamshell-dredged material (including sediment and entrained water) with contaminants that exceed NYSDEC Class C thresholds. In clamshell-dredged areas of New York that do not contain Class C sediments, scow barge overflow would function as the method of dewatering. Scow overflow would only occur in New York waters where clamshell dredging of non-Class C sediments would not results in an exceedance of New York State water quality standards.
AQU-9	Comments regarding disturbing contaminated offshore sediments, including PCBs, and potential health impacts on recreational users and marine life. Commenters also expressed concern regarding potential leaks of hazardous materials from construction vessels. In addition, comments that the draft EIS did not adequately analyze long-term impacts from disturbing contaminated sediments, as well as concerns that dredging activities would reverse previous recovery successes in the Bay. Commenters also expressed concern about potential impacts associated with dredge disposal and dredge disposal sites. Some commenters also contend the information used in our analysis regarding existing contamination	Section 4.5.2.8 discusses the results of Transco's hydrodynamic and contaminant transport modeling for analytes that exceeded Class C thresholds in sediment samples.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	was outdated, thereby minimizing the effects that would result from dredging (e.g., a cited study from 1983).	
AQU-10	Comments related to disposal of dredge material at the HARS and concerns whether the disposal would comply with HARS placement criteria. In addition, comments that the HARS may be at or beyond capacity.	As discussed in sections 4.5.2.8 and 4.5.3.2, Transco has conducted sampling and analysis to confirm that the Project-derived dredge material would be suitable for disposal at the HARS and submitted a preliminary application to the USACE for a permit under section 103 of the MPRSA to transport and dispose of the dredge material at the HARS. Any disposal of dredge material at the HARS would be conducted in compliance with this permit. While Transco's intent is to dispose of suitable materials at the HARS, Transco has also secured a preliminary agreement with an upland disposal facility company in New Jersey to accept any non-suitable material.
AQU-11	Regarding our recommendation in section 4.5.2.8 that Transco file additional chemical sampling results, the volume of material for disposal, and the final offshore and onshore dredge material disposal sites prior to the close of the draft EIS comment period, the NYSDEC commented that it also "requires a description of how and where the dredge material will be dewatered prior to disposal. This description should also be supplied for purposes of FERC's NEPA review. Such information is necessary to fully assess the environmental impacts from the proposed NESE Project and for purposes of the Department's determination regarding the NESE Project's compliance with NYS water quality standards."	As stated in section 4.5.2.8, Transco has secured an agreement with an upland disposal facility in New Jersey to accept all clamshell-dredged material (including sediment and entrained water) with contaminants that exceed NYSDEC Class C thresholds. In clamshell-dredged areas of New York that do not contain Class C sediments, scow barge overflow would function as the method of dewatering. Scow overflow would only occur in New York waters where clamshell dredging of non-Class C sediments would not result in an exceedance of New York State water quality standards.
AQU-12	Comments related to offshore core sampling, including comments that additional sampling should be completed (e.g., throughout the entire 14,165-acre offshore workspace for the Raritan Bay Loop; areas where vessels would travel, moor, and anchor; additional areas around the Raritan Bay Slag site). In addition, commenters state that without the data from additional core sampling we cannot assess the potential impacts from disturbing contaminated sediments and resuspension in the entire work area, and that no measures were identified to prevent resuspension of contaminated sediments.	As discussed in sections 2.2 and 4.5.2.3, the 14,165-acre offshore workspace encompasses a 5,000-foot-wide area centered on the Raritan Bay Loop, largely to provide enough room for spread anchoring of construction vessels. Therefore, the 14,165-acre workspace does not represent the area of seafloor that would be directly disturbed by construction. Rather, we estimate that only 87.8 acres (0.7 percent) of seafloor would be directly impacted by construction (excavations, pipelay, anchoring systems, and backfilling) of the Raritan Bay Loop. Also, the offshore sampling program was conducted in accordance with a detailed plan that was reviewed by the NJDEP and NYSDEC and that included a review of historical dumping activities in Raritan and Lower New York Bay. As discussed in section 4.5.2.8, Transco also conducted hydrodynamic and contaminant transport modeling for analytes that exceeded Class C thresholds in sediment sampled from the respective sampling sites. For the above reasons, we conclude that the offshore sampling program conducted by Transco was sufficient to

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
		characterize the benthic community, sediment composition, and chemical properties of sediments disturbed by construction and to evaluate the potential impacts of construction-related sedimentation on aquatic resources.
AQU-13	One commenter asked for clarification regarding the sediment transport modeling results in table 4.5.2-3 for excavation of the Ambrose Channel HDD Entry Pit (East). The commenter stated: "The table states that it will take 2 hours for the TSS to return to ambient levels. However, the distance of the plume at concentrations >50 and >100 mg/L is zero. This needs to be clarified." The commenter also stated that "[i]t is also not clear how many vibracore samples were taken and in what locations as the draft EIS generally states that samples were taken 'along the proposed route.'"	Updated sediment modeling results have been incorporated into section 4.5.2.8 of the final EIS. Table 4.5.2-3 has been added to identify the various sediment sampling and transport modeling reports filed by Transco and where those documents can be found on the Project docket.
AQU-14	In its comments on the draft EIS, the NYSDEC identified recent data that Transco has provided that should be incorporated into the final EIS, including sediment modeling results.	The updated sediment modeling results have been incorporated into section 4.5.2.8 of the final EIS.
AQU-15	Comment that the only sediment that will be tested for contaminants is the material that is not side-cast by clamshell bucket or sediment disturbed during use of the jet trencher method. The commenter states that, as a result, evaluation of excavated material content is insufficient.	As discussed in section 4.5.2.8, sediment sampling along the Raritan Bay Loop route was conducted during surveys in 2016, 2017, and 2018 to assess the level of contaminants present in excavation areas. Transco also conducted hydrodynamic and contaminant transport modeling for analytes that exceeded Class C thresholds in sediment samples. Given the survey data, modeling results, and available data from previous studies, we conclude that the offshore sampling program conducted by Transco was sufficient to characterize the chemical properties of sediments disturbed by construction and to evaluate the potential impacts of construction-related sedimentation on aquatic resources.
AQU-16	The NMFS provided EFH conservation measures for the Project.	The EFH conservation measures provided by NMFS are discussed in section 4.5.3.3.
AQU-17	One commenter contends the draft EIS did not include an Essential Fish Habitat assessment.	Our EFH Assessment was included in section 4.5.3 of the draft EIS and was submitted to the NMFS to initiate EFH consultation. The EFH Assessment, updated to include our responses to NMFS-recommended conservation measures may be found in section 4.5.3 of the final EIS. Therefore, we conclude that EFH consultation under the MSA is complete.
AQU-18	The NJDEP, MFA and Bureau of Marine Fisheries suggested avoiding or minimizing any disturbances to the seafloor during	As described in section 2.3.3, the Raritan Bay Loop would be installed utilizing techniques that minimize impacts on the seafloor

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	pipeline construction and shoreline development phases of the Project, and encouraged the use of established waterfront terminals and support facilities to minimize impacts on benthic habitats.	and benthic habitats, limiting direct impacts to approximately 87.8 acres. Also, as discussed in section 4.5.2.8, we anticipate that the benthic community would reestablish in 1 to 3 years following completion of construction. To ensure benthic communities recover as expected, we have recommended that Transco file a 5-year post-construction benthic sampling and monitoring plan for the subsea pipeline. As described in section 2.2.4, Transco would utilize two existing waterfront terminals to support offshore construction activities.
AQU-19	Comments regarding impacts on offshore aquatic resources, including impacts from noise. Further, commenters contend that the impacts associated with offshore construction (including pile driving) would be excessive.	Comment noted.
AQU-20	Comments that our analysis of offshore construction methods did not consider alternative pile driving methods to reduce acoustic impacts, and that our analysis of offshore noise impacts did not address the added piles that would be installed and removed as part of the new platform at the Morgan Shore Approach HDD.	The analysis of offshore noise impacts in section 4.5.2.8 has been revised to include the additional piles.
AQU-21	Comments regarding HDD fluid additives and disposal, including concern that the final fluid additives were not evaluated in the draft EIS.	As discussed in section 2.3.2.1, Transco would file with the FERC for review and approval the safety data sheets for any additives needed to optimize HDD operations prior to construction.
AQU-22	The NJDEP provided comments recommending timing restrictions for dredging and development to protect blue crab (from December 1 to April 30), and also noted that the areas of concern are within 500 feet of the Ambrose Channel, Chapel Hill Channel, and Raritan Bay Channel. The NJDEP further commented that notification to commercial crabbers must be made 30 days in advance if work is done during these times and in these areas.	Transco committed to restricting construction of the Raritan Bay Loop from December 1 through April 30 within a 500-foot buffer around the Ambrose Channel and the Chapel Hill Channel (excluding Richmond County, where dredge harvest of crabs is prohibited). Alternatively, Transco would only construct during this period if a 30-day notice is given to registered harvesters, pending approval from the NMFS and in coordination with the NYSDEC and NJDEP.
AQU-23	Several commenters expressed concern regarding impacts on horseshoe crabs, and related impacts on other commercially and recreationally important marine species, as well as migratory birds feeding on horseshoe crabs along the Raritan Bay Loop portion of the Project. Commenters also expressed concern regarding impacts on migratory bird habitat along the Raritan Bay Loop. Commenters also state the information in the draft EIS related to horseshoe crabs is from relatively old survey data.	Survey data from 2017 has been added to section 4.5.2.4. Potential impacts on horseshoe crabs are discussed in section 4.5.2.8. Potential impacts on migratory birds, including migratory bird habitat along the Raritan Bay Loop, are discussed in section 4.5.1.2.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
AQU-24	Regarding horseshoe crabs the NJDEP, ENSP recommends that no activity occur near-shore (i.e., the beach) or off-shore between April 15 and September 15, the same restriction implemented for dredging activities by the Bureau of Marine Fisheries. In addition, the agency commented that the topography and sand composition of the shoreline should not be altered long-term and, therefore, recommended that mitigation measures be implemented to restore (and/or improve) the shoreline for horseshoe crab spawning/egg-laying and shorebird access.	Given the time of year restrictions for other sensitive species, May to September is the only feasible time period for Transco to construct the Raritan Bay Loop. As such, Transco has requested that construction activities be allowed near the Morgan shore during the recommended horseshoe crab time of year restriction (see table 4.5.2-7 of the final EIS) and will continue to consult with the NJDEP about this request. In addition, Transco would avoid impacts on the shoreline in New Jersey by constructing the pipeline via HDD.
AQU-25	The USGS provided comments regarding the NOAA Mussel Watch Program, including one monitoring site in Raritan Bay, referred to as HRRB. The USGS commented that an "increase in dredging will mobilize hydrophobic contaminants and likely increase concentrations in area mussels. Proposed pipeline clamshell dredging for NESE is near site HRRB. Post-construction sampling at this long-term site could be useful in characterizing potential benthic impacts."	Comment noted. Site HRRB is located approximately 1.1 miles from the centerline of the Raritan Bay Loop route at the closest point, and approximately 0.5 mile from the furthest point of sedimentation as predicted by the sediment transport modeling conducted for the Project. Section 4.5.2.8 discusses the hydrodynamic and contaminant transport modeling Transco conducted for analytes that exceeded Class C thresholds in sediment samples.
AQU-26	The NJDEP, ENSP commented that it defers to the NMFS and USFWS regarding mitigation measures relating to marine mammals and sea turtles. In addition, the agency concurred with Transco's speed restrictions imposed to protect right whales between November 1 and April 30, and that vessels should stay at least 150 feet from sea turtles. However, the agency recommended that Project activities in areas proximate to seal haul out sites/foraging areas do not take place during months when seals are known to occur (November-April).	Comment noted. See section 4.5.2.8 for a discussion of the potential impacts of the Project on seal haul-out areas.
AQU-27	The NJDEP, ENSP commented that it concurred with the Bureau of Marine Fisheries' comments that dredging and developing timing restrictions to protect anadromous fish migrations must be observed (i.e., no work or dredging between March 1 and June 30). In addition, the agency commented that construction activities should be avoided during migration periods and not just to the extent practicable because sturgeon could be attracted to construction areas due to the presence of prey items that have been stirred up during construction.	The updated time of year restrictions are discussed in section 4.5.2.8. As the timing restriction windows and allowable work have not been finalized for inclusion in the final EIS, Transco would be required to provide documentation of agency approval for timing restrictions and allowable work prior to construction, as required by the Procedures.
AQU-28	The NJDEP, ENSP commented that it generally defers to the NMFS on mitigation actions relating to marine mammals and sea turtles. The NJDEP, ENSP further commented that, despite efforts to minimize impacts from sea floor disturbance, it believes "the	Comment noted.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	proposed actions will pose a threat to surrounding marine wildlife, including sea turtles," including impacts from turbidity/suspended sediments, and construction activities forcing sea turtles away from preferred foraging areas and possibly putting them at risk from ship strikes. In addition, NJDEP, ENSP stated that increased turbidity could reduce visibility for shipboard observers to spot sea turtles and marine mammals. As such, the agency encouraged that construction activities be kept to a minimum from June through October.	
AQU-29	Commenters expressed concern regarding impacts on harbor seals, specifically on islands next to the Verrazano Bridge and adjacent to the construction zone for the Raritan Bay Loop.	Potential in-air noise impacts on seal haul-outs are discussed in section 4.5.2.8.
AQU-30	The NJDEP provided comments recommending timing restrictions for dredging and development to protect anadromous fish migrations (e.g., Atlantic and shortnose sturgeon) (from March 1 to June 30 and from October 1 to November 30). The NJDEP noted that Transco has requested to work during the month of June, and NMFS is considering that request. In addition, the NYSDEC commented that efforts to minimize impacts on Atlantic sturgeon should be discussed in section 4.5.3.2, including that the timing restrictions were previously agreed upon with involved state and federal agencies.	Impacts on sturgeon are discussed in section 4.6.3.5. A sentence has been added to section 4.5.3.2 reiterating that special status fish species are discussed in section 4.6.3.5. The updated time of year restrictions are discussed in section 4.5.2.8. As the timing restriction windows and allowable work have not been finalized for inclusion in the final EIS, Transco will be required to provide documentation of agency approval for timing restrictions and allowable work prior to construction, as required by the Procedures.
AQU-31	The NJDEP provided comments recommending timing restrictions for dredging and development to protect the spawning and vulnerable life history stages of winter flounder (from December 15 to May 31 in waters shallower than 20 feet MLLW). In addition, the NYSDEC commented that the final EIS should be revised to reflect this timing restriction, and requested that the phrase "extent practicable" in section 4.5.3.2 regarding work during the winter flounder spawning period and depth range should be explained in more detail. In addition, some commenters expressed general concern regarding impacts on winter flounder eggs and asked what measures Transco would implement to mitigate impacts on this species.	The updated time of year restrictions are discussed in section 4.5.2.8. As the timing restriction windows and allowable work have not been finalized for inclusion in the final EIS, Transco will be required to provide documentation of agency approval for timing restrictions and allowable work prior to construction, as required by the Procedures.
AQU-32	Comments that there is a danger of vessel strikes or collisions with marine mammals in Raritan Bay.	Vessel strike potential is discussed in section 4.5.2.8.
AQU-33	Section 4.5.2.8 includes a discussion that Transco petitioned NYSDEC for a larger mixing zone east of Chapel Hill Channel crossing because the sediment modeling indicated that	The discussion of mixing zones has been removed from section 4.5.2.8. Discussion has been added pertaining to Transco's

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	construction activities in this location could not meet the proposed mixing zone requirements. The NYSDEC commented that mixing zones in New York State are "based on the requirements of NYSDEC TOGS 5.1.9. The TOGS mixing zone requirements were developed to ensure protection of aquatic life and are not determined by whether or not a model predicts conformance with them. The final EIS should therefore remove the discussion of Transco's mixing zone petition. The mixing zones along this project route will be different depending on the resources that require protection, such as high clam density areas, and the extent of sediment contamination. The mixing zone in the reach east of Chapel Hill Channel will meet the requirements in the TOGS that pertain to open water areas of estuaries and lakes (1,500 feet, 100 mg/l TSS over ambient). This mixing zone is based on three factors: the reach is located outside of the high clam density area, the sediment is predominantly sandy material, and the concentrations of contaminants are not high."	hydrodynamic and contaminant transport modeling for analytes that exceeded Class C thresholds in sediment samples.
AQU-34	Regarding monitoring for turbidity during construction of the Raritan Bay Loop, the NYSDEC provided comments that section 4.5.2.8 should be revised to indicate that monitoring of the water column for chemical contaminants as well as turbidity will be required in New York State to ensure compliance with New York State water quality standards. In addition, the NYSDEC stated it may include conditions regarding these issues as part of any Water Quality Certification. One commenter also expressed concern that the sediment monitoring and management plan mentions turbidity monitoring during the construction phase, "but does not address how it will minimize the bioavailability of the highly-contaminated and moderately-contaminated sediments."	Sections 4.5.2.8 and 4.5.3.2 have been revised as suggested.
AQU-35	Some commenters expressed concern regarding impacts associated with antibiotic resistance pathogens that exist in shallow seafloor sediment	In consultation with state agencies, Transco has conducted extensive sampling, modeling, and analysis to characterize the nature of the sediments in the Project area and potential adverse impacts associated with sediment disturbance. Additionally, the Project would be constructed in compliance with state water quality standards and in accordance with conditions set forth in the Project's state water quality certifications.
AQU-36	Comments related to impacts of the Raritan Bay Loop pipeline crossing clam populations that are infected with the Quahog Parasite Unknown (QPX).	A discussion of QPX disease has been added to section 4.5.2.8.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
AQU-37	Comments related to the potential for vibrations from the Morgan Shore Approach HDD exit point to affect the Raritan Bay Slag site. Specifically, commenters state that the vibrations could cause lead from the jetties to flake off and increase contamination and increase health impacts. Commenters also contend that our conclusions are not adequate because Transco had not yet provided final plans to mitigate impacts, and that a revised draft EIS should be issued with a new comment period.	The profile of the Morgan Shore Approach HDD indicates that the drill path would be 85 feet below the shoreline and 600 feet from the jetty. In addition, the entire HDD drill path would cross through unconsolidated, saturated deposits that would not readily transmit vibrations. Therefore, the HDD drilling process is not expected to affect shoreline structures such as the jetty or contribute to existing sediment contamination in the area. As discussed in section 1.2.2, the EPA assisted the FERC in preparing this EIS and was consulted regarding potential impacts of the Project on contamination associated with the Raritan Bay Slag site.
AQU-38	Comments related to the offshore construction schedule, including pile installation for the Ambrose Channel HDD. Commenters state that because Transco has not finalized its construction schedule, potential impacts on aquatic resources and appropriate mitigation measures cannot be determined. In addition, commenters identified time of year restrictions for various aquatic species and expressed concern regarding construction activities occurring during these restricted times.	The updated time of year restrictions are discussed in section 4.5.2.8. As the timing restriction windows and allowable work have not been finalized for inclusion in the final EIS, Transco would be required to provide documentation of agency approval for timing restrictions and allowable work prior to construction, as a condition of FERC's Certificate of Public Convenience and Necessity, if approved by the Commission.
AQU-39	Impacts on marine wildlife in the event of a release of natural gas from the pipeline due to leaks or incidents, including impacts from natural gas dissolving into the water.	If a pipeline rupture were to occur beneath a waterbody after pipeline operation has begun, natural gas would percolate through the sediments underlying the water, rise through the water column, and rapidly dissipate into the atmosphere. The potential outcome would depend on the volume of natural gas released and whether an ignition source is available. A pipeline break could result in sediment and debris being thrown from the area of the break and, in the case of ignition, explosion or fire. For a less severe release, natural gas would displace oxygen within the interstitial water of the sediments, resulting in temporary hypoxia within the sediments. As natural gas ascended through the water column it would displace oxygen, possibly producing hypoxic conditions in the immediate vicinity of the release and for some distance down-current. Natural gas could also dissolve into the water column, creating toxic conditions for aquatic organisms. Mobile aquatic organisms would be able to sense low concentrations of dissolved gas and move away from the contaminated area. Exposures to higher concentrations could cause mortality to aquatic organisms in the vicinity of the release.
AQU-40	Comments related to post-construction monitoring of the Raritan Bay Loop to determine sediment coverage of the pipeline. One commenter requested that Transco be required to take before and after photographs to analyze how sediment and wildlife recover	As discussed in section 4.5.2.8, following completion of backfilling operations, Transco would conduct a hydrographic survey to verify that the contours of the seafloor have been restored, and would backfill as needed, in accordance with permit conditions. Transco

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	following trenching activities. In addition, the NYSDEC commented that post-construction benthic sampling and monitoring should be required by the FERC. The NYSDEC also commented that "Transco should also perform post-construction surficial sediment chemical analysis on each side of the trench. These chemical samples could be co-located with the benthic sample sites. In any case, such post-construction monitoring may be required by NYSDEC as a condition of any WQC."	would also conduct an annual post-construction monitoring survey to ensure that adequate burial depth is maintained along the pipeline route. To ensure benthic communities recover as expected, we have recommended that, prior to construction, Transco file a post-construction benthic sampling and monitoring plan for the subsea pipeline.
AQU-41	The NJDEP, Bureau of Marine Fisheries commented that it would defer to the NMFS and New York State regarding timing restrictions of Project construction activities for various aquatic resources.	Comments noted. The updated time of year restrictions are discussed in section 4.5.2.8.

Threatened, Endangered, and Other Special Status Species

T&E-1	General comments regarding Project impacts on special status species, including comments that the level of impacts would be unacceptable and disagreeing with the proposed and recommended mitigation measures.	The EIS reflects the input of federal and state agencies that oversee protections for ESA-listed and state-listed species. We would complete consultation with the FWS and NMFS prior to construction of the Project.
T&E-2	The FWS, Pennsylvania Field Office provided concurrence that the Project is not likely to adversely affect the Indiana bat and the bog turtle. In addition, the agency concluded that prohibited take of northern long-eared bats would be avoided for the Quarryville Loop.	Comment noted.
T&E-3	The FWS, New Jersey Field Office recommended managing bald eagles in accordance with the National Bald Eagle Management Guidelines and all applicable state regulations. In addition, the FWS, New Jersey Field Office also recommended contacting the NJDFW regarding any state requirements to protect the bald eagle's nesting, foraging, and wintering habitats.	Comment noted. Section 4.5.1.2 of the EIS states that Transco has committed to following the National Bald Eagle Management Guidelines.
T&E-4	The FWS, New Jersey Field Office provided concurrence that the Project is not likely to adversely affect the northern long-eared bat, piping plover, red knot, seabeach amaranth, and roseate tern. In addition, the FWS, New Jersey Field Office commented that a summer survey for the presence/absence of Indiana bats at Compressor Station 206 would be required in the event of a Project modification that would result in tree clearing to the active season for the Indiana bat.	Comment noted.
T&E-5	The New York and Long Island Field Offices of the FWS provided comments concurring with our determinations that the Raritan Bay	Comment noted.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	Loop portion of the Project may affect, but is not likely to adversely affect, the federally listed piping plover, red knot, and roseate tern.	
T&E-6	The FWS, New Jersey Field Office provided concurrence with the negative survey results of swamp pink provided by Transco, and commented that the bog turtle is not known to occur in the vicinity of proposed Compressor Station 206 of the Madison Loop.	Comment noted.
T&E-7	The FWS, New Jersey Field Office commended that it supports the recommended timing restrictions by the NMFS and NJDFW for winter flounder and river herring.	Comment noted.
T&E-8	One commenter stated that the draft EIS states that 23 federally listed species may occur in the Project area, but only 7 of those would suffer no effect. The commenter further stated that the remaining 16 species at risk of harm, death, or other measurable impact.	As discussed in revised section 4.6.3, based on our analysis of Project effects on federally listed species, we have determined that the Project would have no effect on 7 federally listed species; may affect, but is not likely to adversely affect 12 federally listed species; is likely to adversely affect 3 federally listed species, and is not likely to jeopardize 1 federally proposed threatened species. However, because we have not yet completed our consultation with the NMFS for federally listed species, we recommend that Transco not begin construction activities until our consultation with the NMFS is complete.
T&E-9	In its response to our request for consultation under section 7 of the ESA, the NMFS noted that it would defer consultation until Transco has prepared a complete project timeline identifying the "no work windows" designed to minimize exposure of Atlantic sturgeon to project components as well as the low impact activities that are scheduled during the "no work" windows, and completed its acoustic analysis associated with pile driving, including consideration of the time of year pile driving is planned and the seasonal distribution of North Atlantic right whales.	The updated acoustic analysis has been incorporated into sections 4.5.2.8 and 4.6.3. The updated time of year restrictions are discussed in section 4.5.2.8. As the timing restriction windows and allowable work have not been finalized for inclusion in the final EIS, Transco will be required to provide documentation of agency approval for timing restrictions and allowable work prior to construction, as a condition of FERC's Certificate of Public Convenience and Necessity, if approved by the Commission.
T&E-10	The Chester County Planning Commission noted "that Transco has completed Phase 1 bog turtle habitat surveys within 300 feet of Compressor Station 200, and concluded that the habitat is not present in the work area. Therefore, additional surveys for bog turtles in this area are not required (per National Fish and Wildlife Service concurrence dated April 25, 2017)."	Comment noted.
T&E-11	Regarding migratory birds, the FWS, Pennsylvania Field Office stated that it would defer comment until it has reviewed the final Migratory Bird Plan, which Transco proposes to file prior to construction of the Quarryville Loop. In addition, the FWS,	Comment noted. Transco filed its Final Migratory Bird Plan on November 6, 2018, which addressed the comments of the FWS, Pennsylvania Field Office.

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Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	Pennsylvania Field Office provided general recommendations to avoid and impacts on migratory birds within and around the Project area, including: clearing of natural or semi-natural habitats should be completed between September 1 and March 31; permanent habitat alterations should be avoided in areas where birds are highly concentrated; sizable structures along known bird migration pathways or known daily movement flyways should be avoided; avoid and reduce fragmenting large, contiguous tracts of wildlife habitat; and develop a habitat restoration plan for the proposed site that avoids or minimizes negative impacts on vulnerable wildlife, and uses only plant species that are native to the local area for revegetation of the Project area.	
T&E-12	Regarding Flood Hazard Area Control Act Rules, the NJDEP noted that the currently proposed Project does not contain documented habitat for any threatened or endangered plant or animal species that are critically dependent upon the regulated water course for survival and, as such, the NJDEP does not anticipate any riparian zone requirements based on documented and suitable threatened or endangered species habitat. However, the agency commented that there is documented and suitable threatened or endangered species habitat for bald eagle, osprey, and black-crowned night heron within areas regulated by the FHACA Rules timing restrictions and/or conditions may apply for work in these locations.	Comment noted. Section 4.6.4.2 addresses Transco's consultation with NJDEP and proposed mitigation for state-listed birds.
T&E-13	Regarding Freshwater Wetlands Protection Act Rules and Coastal Zone Management Rules, the NJDEP commented that regulated areas that are found to be documented and suitable habitat for state and federally listed threatened and endangered species may require timing restrictions and/or other conditions. Specifically, no work is permitted within an osprey nest buffer 4/1 through 8/31; no construction activities [within a bald eagle nest buffer] involving heavy machinery may occur between 12/15 and 7/31 of the calendar year without the prior approval of the NJDEP, to protect bald eagle foraging habitat, the lowering of lakes and other de-watering activities may not occur from January 1 to July 31 within specific project areas, and any sightings of bald eagles must be reported and a sighting report shall be filed with the Division of Fish and Wildlife-Non-Game Program; and no work is permitted 4/1 through 8/15 [within a black-crowned night heron nest buffer]. [the parts in brackets are assumptions; the comment was not specific]	Comments noted.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
T&E-14	The Endangered and Non-game Species Program of the NJDEP commented that it would review the BA for the Project if the FWS and NMFS agree with our request to consider the draft EIS as the office BA for the Project.	Comment noted.
T&E-15	The NPS stated that it concurs with the FWS' statements that the piping plover, red knot, and seabeach amaranth (species known to occur at the Gateway) are unlikely to be disturbed by Project activities for Alternatives 2-4 and the proposed action.	Comment noted.
T&E-16	Regarding migratory birds, the FWS, New Jersey Field Office commented that it supports the recommendation of the NJDFW to avoid clearing of herbaceous vegetation during the nesting season (mid-April to mid-July) of the upland sandpiper, or conduct surveys to confirm its absence. The FWS, New Jersey Field Office further noted that the upland sandpiper may nest within or in the vicinity of the Madison Loop.	Comment noted.
T&E-17	Commenters noted that a Kemp's ridley sea turtle laid eggs on Queens Beach in the Gateway National Recreation area.	Section 4.6.3.4 has been revised to include additional discussion of this occurrence of a Kemp's ridley sea turtle laying eggs in the Gateway National Recreation Area.

Land Use, Recreation, Special Interest Areas, and Visual Resources

LU-1	Comments related to impacts on existing developed areas, including retail, commercial, and residential structures.	Section 4.7.3 and 4.7.4 of the EIS identifies residences and commercial and industrial facilities within proximity to the project, including known planned developments, and the construction and operational impacts on these structures.
LU-2	The Chester County Planning Commission provided comments that the portion of the Project in Chester County is within an area defined in Landscapes2, the Comprehensive Policy Plan for Chester County, as Suburban Landscape. The County further commented that these "are locations in which Objective LU3 of Landscapes2 promotes development that accommodates anticipated population and employment growth, using appropriate density, sustainable design and smart transportation principles, in addition to the provision of the necessary infrastructure to enable this type of development to occur."	Comment noted.
LU-3	The Chester County Planning Commission provided comments that there are multiple properties throughout the Chester County portion of the Project that contain open space preservation easements. The County further commented that while it recognizes that these	Comment noted.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	parcels are not directly impacted, Transco should be aware that there are multiple parcels within 0.5 mile or less of Compressor Station 200 in East Whiteland Township that are protected open space preserved by municipal, land trust, homeowner's association, or agricultural preservation easements.	
LU-4	Commenters expressed concern related to construction near landfills and other contaminated sites, including Superfund sites, and asked how excavation in and around these sites would avoid additional environmental impacts in this area.	As described in section 4.7.8.3, Transco developed an Unanticipated Discovery of Contamination Plan that describes how potential contaminants would be recognized during construction and specifies the steps that would be implemented to assess and respond to the contamination; and Transco would implement its Materials and Waste Management Plan that further detail how contaminated media would be managed.
LU-5	Regarding Transco's commitment to continue to consult with EPA Superfund regarding construction at the Raritan Bay Slag site (as discussed in section 4.7.8 of the draft EIS), the EPA noted in its comments that it agrees that ongoing coordination is necessary.	Comment noted.
LU-6	Regarding the Fishing Creek and Wissler Run Nature Preserves, the EPA recommended that the Lancaster County Conservancy be consulted prior to construction to avoid impacts that may hinder its participation or the goals of its enrollment in the PAGC's Cooperative Forest-Game Project.	The statement in section 4.7.5.1, Fishing Creek Nature Preserve North has been edited as follows, "Transco would coordinate with the Lancaster County Conservancy to develop suitable measures to minimize disruption to visitors of the preserve and to ensure construction of the Project does not interfere with game species and habitat management goals within the preserve." The Project does not cross the Wissler Run Nature Preserve and no impacts to this preserve are anticipated; therefore, no edits were made to the Wissler Run Nature Preserve discussion.
LU-7	Comments regarding impacts on the NJBVMC, including from noise, odors and emissions, and safety.	Section 4.7.5.1 addresses the potential indirect impacts on public use of the meditation trail at the NJBVMC from construction and operation of Compressor Station 206. Noise and air emissions impacts are summarized in this section as well, and are further addressed in sections 4.10.1.6 and 4.10.2.2, respectively. We conclude that construction related impacts on users of the NJBVMC would be minor and temporary and would diminish with distance from the compressor station site. Operation of Compressor Station 206 would also not have a significant impact on users of the NJBVMC as air emissions would comply with applicable regulations that are protective of public health, and noise should be relatively minor in proximity to the Samadhi Buddha statue, and would comply with our noise requirements at the nearest point of the meditation trail to the compressor station.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
LU-8	Regarding the Golden Age property conservation easement and Green Acres Program properties, the NJDEP provided comments regarding potential Green Acres encumbered parkland owned by the Borough of Sayreville and the need to consult with the Borough regarding this land if it is crossed. In addition, the NJDEP commented regarding requirements for replacement land if encumbered parkland or Conservation Easements are crossed; tree replacement requirements for Green Acres encumbered land; and the need to quantify impacts on forested areas on recreation and parkland parcels (number and size of trees removed).	Section 4.7.5.1 has been revised based on information received from Transco since the draft EIS to note that Transco consulted with the NJDEP to develop its planned route for the Madison Loop near the Golden Age property to avoid the conservation easement. Because no direct impacts on the conservation easement would occur, the Project would not conflict with the prescribed preservation goals for this parcel. In addition, in its June 1, 2018 supplemental filing, Transco provided correspondence from the attorney for the Borough of Sayreville, dated August 2, 2016, that confirms the property at Block 454, Lot 1 is not Green Acres encumbered. Therefore, we consider this comment to be addressed.
LU-9	Regarding existing residencies and commercial and industrial facilities, the Chester County Planning Commission commented that no residencies or commercial and industrial facilities are located within 50 feet of the construction work area in Chester County.	Comment noted.
LU-10	One commenter expressed concern regarding impacts on their organic farm, which is located on Route 518 across the street from the proposed Project.	The organic farm noted by the commenter is located on the opposite side of Route 518 from Compressor Station 206. Construction of the compressor station would not directly impact the farm. As discussed in section 4.7.1.1, Transco would be required to implement the measures outline in their Agricultural Construction and Monitoring Plan and Spill Plan during construction for organic farms that are directly impacted.
LU-11	The Chester County Planning Commission provided comments regarding two additional projects that should be added to the list of proposed and planned residential and commercial projects in table 4.7.4-1.	Section 4.7.4 and table 4.7.4-1 have been revised to include the two additional planned developments.
LU-12	General comments related to construction near the Raritan Bay Slag Superfund site, and potential impacts from disturbing contaminated sediments.	As discussed in section 4.7.8.2, Transco is consulting with the EPA, which manages the remediation of the site; the nearest area designated for cleanup is more than 200 feet from proposed excavations; Transco would dispose of sediments excavated from less than 15 feet of water (which would include the RBS area) at the HARS or another approved site; and Transco would replace the excavated sediment with sandy backfill from approved source(s).
LU-13	Comments related to potential impacts on recreation areas (including the Millstone Valley Scenic Byway, the Delaware and Raritan Canal, and Delaware Water Gap recreation areas).	As discussed in section 4.7.5, our review for potential Project impacts on recreation and special interest areas is focused on the area within 0.25 mile of the Project. Based on a review of publicly available data, many of the recreation and special interest areas noted in comments we received are located greater than 0.25 mile

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		away from the Project area (the distance from the Compressor Station 206 site of the areas listed above range from 0.3 mile from the (Washington-Rochambeau Revolutionary Route) to approximately 1.7 miles (Princeton Ridge Preserve)) and, therefore, are beyond the scope of our review.
LU-14	One commenter expressed concern related to a nature preserve at Raritan Canal on Route 27.	As discussed in section 4.7.5, our review for potential Project impacts on recreation and special interest areas is focused on the area within 0.25 mile of the Project. Based on review of publicly available data, the Delaware and Raritan Canal is greater than 2 miles from the site of Compressor Station 206 and no nature preserves were identified within 0.25 mile of the compressor station site.
LU-15	Comment that the EIS did not utilize recreational use data from the Mid-Atlantic Ocean Data Portal.	A variety of reputable sources were used to characterize recreational uses in offshore Project areas. The Northeast Ocean Data website was used to characterize commercial whale watching activities; however, as noted in section 4.7.5.2, information from the Mid-Atlantic Data Portal was used to characterize recreational SCUBA diving and snorkeling areas that would be crossed by offshore portions of the Project.
LU-16	The Chester County Planning Commission provided comments regarding the location of Compressor Station 200 within the Schuylkill River National and State Heritage Area. The Chester County Planning Commission noted that the proposed work at the compressor station would occur on Transco-owned property and, as such, commented that Impact on the Schuylkill River National and State Heritage Area should be minimal, if any.	Comment noted.
LU-17	The Chester County Planning Commission provided comments regarding potential impacts on existing utilities near Compressor Station 200. Specifically, the County identified a PECO right-of-way between the compressor station site and the Malvern Hunt subdivision, as well as multiple natural gas and gas liquids transmission lines in East Whiteland Township.	As discussed in section 2.3.2.8, Transco is consulting with utility companies to determine the exact locations of utilities in relation to the pipeline loops and protective measures that would be implemented during construction. Any relocation of utilities would be completed by the utility company having jurisdiction and would be supported financially by Transco, as required.
LU-18	The NJDEP commented that, because FERC has not issued a Certificate for the Project, and Transco does not yet have an approved disposal location for sediment that is to be dredged from Raritan Bay, the NJDEP cannot determine consistency with New Jersey's Coastal Zone Management Program, and compliance with the Coastal Zone Management Rules, Flood Hazard Area Rules,	Comment noted. As stated in sections 4.7.6.2 and 5.2, Transco would be required to file with the Secretary documentation of concurrence from the NJDEP that the Project is consistent with the CZMA prior to construction.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	and Freshwater Wetlands Protection Act Rules cannot be determined.	
LU-19	The NJDEP, Division of Land Use Regulation, provided a copy of its comments to the USACE stating that it received a request from Transco for a Waterfront Development Permit for the Project pursuant to New Jersey's Coastal Zone Management Rules, N.J.A.C. 7:7-1.1 et seq. However, the NJDEP stated that the application was deficient to the extent that the Division of Land Use Regulation is unable to find that the proposed Project is consistent with the enforceable policies of the New Jersey Coastal Zone Management Program.	Comment noted. As stated in sections 4.7.6.2 and 5.2, Transco would be required to file with the Secretary documentation of concurrence from the NJDEP that the Project is consistent with the CZMA prior to construction.
LU-20	Comments related to visual impacts from Compressor Station 206, including from lighting at the site.	Section 4.7.9.3 acknowledges that lighting would be required and present at Compressor Station 206. Lighting would have directional control or be positioned in a downward position to minimize their visibility from local residences and their effects on migratory birds, while maintaining OSHA standards for lighting.
LU-21	Comment that the Raritan Bay Loop may visually affect the offshore recreation experience for tourists, as well as local residences (including beachgoers).	Section 4.7.9 acknowledges the impacts associated with pipeline construction, including the Raritan Bay Loop.
Socioeconomics		
SOCIO-1	Commenters expressed concern that the draft EIS did not adequately assess the effects of the projects on property values, and that the Project would reduce values. In addition, commenters expressed concern that negative impacts on property values would result in tax increases across the rest of the town.	Potential impacts on property values are discussed in section 4.8.8 of the EIS. This section provides an overview of existing studies on this issue and discusses potential Project-related impacts. Based on FERC staff's research, our analysis found no conclusive evidence indicating that natural gas pipeline easements or compressor stations have a significant negative impact on property values in general, although this is not to say that any one property may or may not experience an impact on property value for either the short or long term.
SOCIO-2	Comment that the EIS did not accurately identify the nearest local emergency responders in proximity to Compressor Station 206.	Section 4.8.4 has been updated for clarity.
SOCIO-3	Concerns regarding coordination with local emergency response providers, and the ability of local emergency response providers to respond to an incident during operation of the projects. Some commenters also expressed concern about the cost to local taxpayers for emergency response preparation and training.	Section 4.8.4 describes the effects that the Project could have to local services (including emergency services). As described in section 4.11.1, DOT regulations require that Transco establish and maintain a liaison with appropriate fire, police, and public officials and to coordinate mutual assistance and ensure that these services have the equipment and training necessary to

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		respond to any emergencies related to the Project. Transco would communicate with emergency responders on an annual basis. Transco would also establish a continuing education program to enable customers, the public, government officials, and those engaged in excavation activities to recognize a gas pipeline emergency and report it to appropriate public officials.
SOCIO-4	The New York City Department of Transportation provided comments asking to identify the following regarding the 5.5 acres of land that would be affected by on-shore construction of the Project in New York: borough(s) that would be affected by construction, location(s), duration and total and peak number of truck and auto/person trips.	Regarding the 5.5 acres of land, section 5 has been corrected to state this land would be affected in New Jersey, as part of a contractor yard at the existing C&ME site.
SOCIO-5	Comments related to our discussion of employment that could be generated by the Project. The Goodman Group, Ltd. provided a report evaluating the economic impact study prepared by Rutgers University for Transco to assess the economic impacts of the Project. The Goodman report contends that the Rutgers study over-estimated the total jobs that would be created during construction (including direct construction jobs and offsite jobs that would result from increased activity in the area) thereby over-estimating the Project's overall economic impacts. The report identifies discrepancies between the Rutgers Analysis of impacts (specifically the employment numbers used in the analysis) and the construction workforce data provided by Transco. In addition, the Goodman report notes that the construction-related employment would be temporary (lasting for 1 year), permanent jobs would be minimal (two employees in New Jersey during operation of the Project), and tax revenues associated with Project activities would be minimal in context of the overall tri-State economy.	The discrepancies between the Rutgers analysis and the workforce data provided by Transco are acknowledged. The Rutgers Study, completed in 2017, represents workforce and economic benefits at the early stages of the design phase of the Project. The information from the Rutgers study, analyzed in section 4.8.9, represents a high-level summary of economic benefits based on initial Project workforce need projections. As the Project design progressed, Transco updated workforce need and the new estimated employment numbers were included in section 4.8.3.
SOCIO-6	Concern was expressed that Project would result in an increase in the cost of natural gas/utilities to end consumers.	<p>The purpose and need for the Project is described in section 1.1 of the EIS. This section summarizes Transco's stated objectives, which include serving the energy needs of public utilities and local distribution companies to serve residential and commercial customers in the New York City Area.</p> <p>In general, natural gas prices are mainly a function of market supply and demand. It is beyond the scope of this EIS to assess the potential change in the future price of natural gas due to changing demand and the exact future price of natural gas to the consumer is unknown. How any savings are allocated or passed on to consumers is more appropriately addressed through the state public</p>

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
		utilities commission or applicable agency with jurisdiction over the local distribution agency.
SOCIO-7	Comments related to impacts from construction traffic. Some commenters expressed concerns about the addition of Project-related truck traffic near the Compressor Station 206 site to existing truck traffic from the Trap Rock quarry. Commenters also expressed concern regarding pedestrian safety with the additional construction traffic. In addition, one commenter specifically noted congestion along Route 35 near the Madison Loop.	Potential impacts on traffic are discussed in section 4.8.7 of the EIS. Our analysis concluded that construction of the Project would result in temporary impacts on the local transportation infrastructure and vehicular traffic in the Project area. Transco has committed to implementing traffic-control measures to ensure safety for vehicles and pedestrians and has committed to providing a Traffic and Transportation Management Plan that would detail specific procedures for avoiding and mitigating traffic and other transportation-related issues. With proposed mitigation measures in place, we conclude construction of the Project would result in minor, temporary impacts on roads and traffic in the Project area.
SOCIO-8	One commenter expressed concern that the electrical requirements at Compressor Station 206 could negatively affect the electric transmission infrastructure.	Comment noted.
SOCIO-9	Comments related to environmental justice populations, including potential health impacts.	Section 4.8.10 includes our analysis of impacts on environmental justice communities. To summarize, 5 census tracts within 1 mile of Project facilities were identified as having environmental justice populations. Potentially adverse environmental effects associated with the Project on surrounding communities, including environmental justice communities, would be minimized and/or mitigated, as applicable, and would not be high and adverse. We also determined that the NESE Project would not result in disproportionately high and adverse impacts on minority and low-income populations. As documented throughout the EIS, Transco would implement a series of measures to minimize potential impacts on the nearby communities, including environmental justice communities, near Project facilities.
SOCIO-10	Comments that the Raritan Bay Loop would affect the coastal commercial and tourism economies, including impacts on businesses and jobs. In addition, commenters contend that impacts on aquatic resources would result in negative impacts on fishing grounds, recreational fishing, and commercial fishing. In addition, the NJDEP commented that installation of the Raritan Bay Loop would result in impacts on shellfish species in the Bay and in surf clam habitat areas where bait clam harvest is allowed under special permit to harvest in Prohibited waters. The NJDEP further	Potential impacts on coastal commercial and tourism economies, including recreational and commercial fishing, are discussed in sections 4.8.5 and 4.8.6 of the EIS. Our analysis concluded that based on the impacts identified, Transco's proposed measures to reduce impacts, the Project would not result in significant or adverse long-term impacts on recreational or special interest areas. As such, and given the relatively short timeframe for construction, we conclude the Project would not result in significant or adverse long-term impacts on tourism or commercial fishing. Section 4.5.2

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	commented that Transco should consider mitigation for impacts on the fishery and ensure proper outreach to the fishery management councils.	discusses in detail Transco's proposed measures to reduce impacts on commercial fishing operations. Regarding the measures identified by the NJDEP, we expect that specific requirements of the NJDEP would be addressed in the appropriate state authorizations.
SOCIO-11	Regarding the installation of concrete mattresses over subsea cable crossings, the NYSDEC commented that "fishing gear can become snagged on concrete mattresses causing a safety issue and potentially resulting in damage. The use of concrete mattresses should be minimized to the extent practicable and Transco should identify the dimensions of each mattress and the coordinates for each mattress location. This information should be further discussed in the final EIS and should be made available to mariners."	Section 4.5.2.8 describes the installation of the concrete mattresses and measures to be taken to prevent fishing gear from snagging on the mattresses. The toe ends of the concrete mattresses would be buried to a minimum of 3 feet below the seafloor. In addition, Transco expects to achieve at least 1 foot of sediment cover over the concrete mattresses, but concrete mattresses may be exposed.
SOCIO-12	Several commenters expressed concern regarding the safety zone around offshore construction vessels and potential impacts on other vessels in Raritan Bay, including impacts on recreational users and impacts on businesses operating on the Bay (e.g., commercial fishers, whale watching boats, shellfish harvesters). Commenters refer to "a 2,500-foot radius construction area" that would affect boat traffic during the 9-month construction period. Commenters also disagree with our conclusions that the impacts on boat traffic would be minor, given the 9-month construction schedule, and asked how the construction safety zones would be implemented given the amount of vessel traffic in the area. In addition, commenters expressed concern regarding how the safety of boaters would be ensured during construction.	Potential impacts on coastal commercial and onshore and offshore tourism economies, including recreational and commercial fishing, are discussed in sections 4.8.5 and 4.8.6 of the EIS. Our analysis concluded that, based on the impacts identified and Transco's prepared measures to reduce impacts, the Project would not result in significant or adverse long-term impacts on recreational or special interest areas. As such, and given the relative short timeframe for construction, we conclude the Project would not result in significant or adverse long-term impacts on tourism or commercial fishing. Section 4.5.2 discusses in detail Transco's proposed measures to reduce impacts on commercial fishing operations. As discussed in section 4.8.6, Transco would establish informal construction safety zones around segments of the Raritan Bay Loop that are actively under construction. Transco would provide a Local Notice to Mariners and/or direct notice to commercial fishing operations so that boaters will be made aware of Project construction locations and can avoid these areas during active construction.
SOCIO-13	Comments related to impacts of construction-related marine vessel traffic, including comments that our analysis was incomplete and should have considered short- and long-term impacts from marine vessel traffic. In addition, comments that our analysis likened construction-related marine vessel activities and movement patterns along the 15,585.7 acres of offshore workspace to normal bay marine vessel activities. Commenters also contend that our	Comments noted.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	analysis should review the offshore activities, patterns, and moorings associated with each pipeline segment and the impact on toxic sediment disruption, benthic organisms, and acoustical impact.	
Cultural Resources		
CULT-1	One commenter noted they have a historic 1701 farm for which they are in the process of preserving. The commenter further expressed opposition to the proximity of the pipeline across the street from the property.	Transco has completed cultural resources surveys and historic aboveground inventory of Compressor Station 206 and the adjacent pipeline corridor. No sites or structures dating from the 17 th and 18 th centuries were recorded in the vicinity; therefore, the Project would have no effect on historic properties.
CULT-2	The NJHPO noted that consultations under section 106 are ongoing and concurred with the recommendation in the draft EIS to consult with the NJHPO regarding the four submarine cables that would be crossed by the Project.	Transco completed consultation with NJHPO concerning four submarine cables on April 19, 2018, and on May 9, 2018, the NJHPO concurred that the cables are unlikely to be intact or present within the offshore portion of the Project.
CULT-3	The Stockbridge-Munsee Tribal Historic Preservation office commented that "due to the lack of cultural resource findings we do not have outstanding concerns in the Section 106 process. Should any cultural materials inadvertently be discovered, should designs change, or new cultural resource information not contained in these surveys come to light we request to be notified for further consultation."	In accordance with the procedures in Transco's UDP, the Stockbridge-Munsee Community of Wisconsin will be notified if Native American remains or traditional cultural properties are encountered during construction.
CULT-4	Comments related to impacts on Rockingham House.	Section 4.9.1.1 includes a discussion of Rockingham House.

Air Quality

AIR-1	General comments related to compressor station noise and odors. In addition, one commenter stated that the draft EIS does not clearly explain the potential impacts related to emissions, heat, and noise. Another commenter expressed concern regarding impacts on nearby recreational areas, specifically citing Rockingham, along the Millstone Valley Scenic Byway, and the Delaware and Raritan Canal.	As discussed in section 4.10.1.6, Transco would utilize deodorization facilities for planned blowdowns. Impacts associated with heat, air emissions and noise are discussed throughout sections 4.5.1.1, 4.10.1, and 4.10.2, respectively. Regarding noise impacts in nearby recreational areas, section 4.10.2.2 demonstrates that the noise increase from Compressor Station 206 at the nearest NSA (2,500 feet away) would be less than 1 dBA (not perceptible by the human ear). The nearest points along the Millstone Valley Scenic Byway and the Delaware and Raritan Canal are about 2 miles and 1 mile from the Compressor Station 206 site, respectively, and would experience an even lower increase in noise, if any. Section 4.5.1.1 of the draft EIS included a discussion of potential impacts associated with heat exhaust from Compressor Station 206 and has been
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TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		revised to include additional information. Because the exhaust is vented to the atmosphere (unbounded), the stack exhaust would dissipate and the temperature would cool to ambient levels. The high-temperature, high-velocity exhaust would travel on an upward trajectory based on wind direction and speed and would be above ground level. Heat impact is anticipated to be minimal within a short distance from the stack exit, and negligible on local weather patterns. Finally, in our experience, there have been no significant impacts associated with the heat from compressor station exhaust.
AIR-2	General comments regarding impacts from Project-related emissions, including comments that onshore and offshore pipeline leaks and emissions are unacceptable, or that our analysis was inadequate and did not fully analyze potential impacts from operational leaks. Some commenters also expressed concern that the analysis of construction-related air quality impacts described in the draft EIS was inadequate due to the number of construction vessels that are proposed. One commenter also expressed concern regarding blowdown impacts from meter stations.	<p>Transco revised its Air Quality Technical Report on August 21, 2018, which included detailed emissions associated with offshore marine vessels and construction equipment/activities.</p> <p>Fugitive emissions from the NESE Project facilities are discussed in section 4.10.1.6. As discussed in the EIS, Transco operates under a Control Measures Plan in accordance with NJAC 7:27-16.21 to control potential VOC emissions associated with applicable blowdown events for its natural gas pipeline operations in the state of New Jersey. In addition, the EIS discloses that operation of the NESE Project pipelines (e.g., via mainline valves or tie-ins) would result in fugitive emissions of 0.0006 tpy of VOC, 3.4×10^{-7} tpy of HAPs, and 7.0 tpy CO_{2e} of GHGs. There are no new meter stations proposed as part of the NESE Project.</p>
AIR-3	Comments regarding health impacts associated with operation of the Project, and that our analysis did not adequately address impacts from emissions and particulate matter. Commenters also contend that gas sourced from shale formations poses an increased risk to health. Some commenters also state that the regulations in place are not protective of human health. In addition, commenters contend that our analysis of potential health impacts is not adequate and that the EIS should consider the potential negative contributions to local air quality by Compressor Station 206 on top of the current nonattainment status, including health impacts on local residents.	Air quality impacts are discussed in detail in section 4.10.1. As stated in the EIS, Transco used air quality data from EPA-approved monitors managed by state and/or tribal agencies that are near the Project facilities or are representative of the surrounding air quality, as required by EPA. Based on modeling results for Compressor Station 206, the emissions from the new compressor, including particulate matter emissions, when combined with the existing background levels, would meet the NAAQS, which were established by the EPA to be protective of human health, including children, the elderly, and sensitive populations. In addition, the data provided in section 4.10.1 regarding the NAAQS and federal permitting programs and their applicability to the NESE Project have been derived from government sources, specifically the EPA, and state agencies enforcing federal regulations. The EPA, as required by law, periodically reviews the NAAQS standards to ensure they provide adequate health and environmental protection and updates the standards as necessary. This is not the forum to address the adequacy of the NAAQS.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
AIR-4	Comments regarding the need for a health impact assessment to be completed for the Project, including comments that request we complete a Health Impact Assessment, and that disagree with our conclusion in the draft EIS that a Health Impact Assessment is not warranted. In addition, commenters contend that the NAAQS standards cannot be cited as a factor for our decision to decline to complete a health impact assessment because the NAAQS does not review certain chemicals (including formaldehyde, ammonia, acrolein, acetaldehyde, ethylbenzene, benzene, toluene, propylene oxide, or xylene). The Sierra Club also provided comments that our analysis was inaccurate and, as such, a Health Impact Assessment is warranted.	As demonstrated in table 4.10.1-5, total HAPs from Compressor Station 206, including leaks, would be 0.71 tpy. Transco's gas composition was provided in table 4.10-1-7 of the EIS. The primary component is methane, a greenhouse gas. While it is correct that there are no NAAQS for HAPs, there are federal regulations that govern HAPs emissions. Under NESHAP rules, Compressor Station 206 would be a minor source of emissions. In addition, Transco would comply with all applicable monitoring, reporting and recordkeeping requirements under NESHAP regulations. Therefore, we reiterate our conclusion that an HIA for a facility of this size is not warranted.
AIR-5	Comments related to emissions (including chemicals) from Compressor Station 206, including comments that compressor station and pipeline leaks and emissions are unacceptable, or that our analysis was inadequate and did not fully analyze potential emissions from the station and subsequent impacts. In addition, commenters state that independent measurements of emissions should be completed at specific times of the year, that the use of emissions estimates in the draft EIS is not appropriate, and that we should review emissions from other Transco compressor stations that use the same turbines in our analysis. In addition, some commenters state that because emissions data was collected from air quality monitoring stations away from the site, the results do not reflect air quality conditions at the site. Further, commenters request that we require, before issuance of the final EIS and throughout the life of operation, onsite air quality monitoring of emissions of Compressor Station 206 as well as measurement of leaks from the associated pipeline (commenters also state that such comments submitted before issuance of the draft EIS were not addressed). One commenter also expressed concern that emissions could affect the fertility of their chickens.	As stated in section 4.10.1.6, Transco conducted modeling in accordance with state and federal guidelines and the results indicate that Compressor Station 206 would meet the NAAQS. Transco used air quality data from EPA-approved monitors managed by state and/or tribal agencies that are near the NESE Project facilities or are representative of the surrounding air quality, as required by EPA. Therefore, we decline to require onsite monitoring prior to issuance of the final EIS. In addition, Compressor Station 206 emissions would be monitored, recorded, and reported as required by NJDEP regulations. Compressor station emissions are evaluated based on continuous peak exposure (the station's potential to emit), and not averages as suggested, which provides a conservative, worst-case emissions scenario. Therefore, we decline to require additional monitoring for Compressor Station 206. As discussed in section 4.11.1, Transco would regularly inspect the pipeline facilities for leaks using methods prescribed by DOT and would monitor the integrity of the facilities continuously from its Gas Control Center. Finally, regarding chicken fertility, we conclude that the impacts from the pipelines and new and modified compressor stations, when combined with the existing background levels, would comply with the NAAQS, which were established by the EPA to be protective of human health and public welfare (including animals and crops).
AIR-6	Comments that the draft EIS does not analyze methods to reduce heat emissions from Compressor Station 206. Commenters assert that the draft EIS should have analyzed the potential for a waste heat recovery system to be installed at Compressor Station 206, including comments that such a system would reduce	Waste heat recovery, a method that would utilize heat from compressor engine exhaust, was analyzed in section 4.10.1.7. We concluded that waste heat recovery would not provide a significant advantage over the proposed NESE Project. Section 4.5.5.1 of the draft EIS included a discussion of potential impacts associated with

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	environmental damage and provide power to an electric turbine. In addition, the draft EIS does not fully analyze the impacts from heat emissions from the compressor station.	heat exhaust from Compressor Station 206 and has been revised to include additional information. Because the exhaust is vented to the atmosphere (unbounded), the stack exhaust would dissipate and the temperature would cool to ambient levels. The high-temperature, high-velocity exhaust would travel on an upward trajectory based on wind direction and speed and would be above ground level. Heat impact is anticipated to be minimal within a short distance from the stack exit, and negligible on local weather patterns. Finally, in our experience, there have been no significant impacts associated with the heat from compressor station exhaust.
AIR-7	Comment that the FERC cannot assume Transco would mitigate all construction emissions without additional data.	As described in the final General Conformity Determination, we recommend that the Commission include conditions in any authorization it may issue that include enforceable measures to ensure that Transco's mitigation projects are in place and generating offsets prior to construction. Transco would track construction emissions and mitigation project emissions reductions, and provide these reports to FERC, EPA, NYSDEC, and NJDEP. Also, the General Conformity regulations include provisions to reevaluate conformity should actual emissions exceed estimated emissions by an applicability threshold. Lastly, should Transco not be able to generate sufficient offsets through direct mitigation projects, we have verified that there are more than enough ERCs available to cover the worst-case construction emissions scenario, if necessary.
AIR-8	The NJDEP provided comments regarding the use of non-road diesel construction equipment and measures to minimize the impacts of diesel exhaust.	Comment noted.
AIR-9	The NY/NJ Baykeeper, Food and Water Watch, Central Jersey Safe Energy Coalition, and Princeton Manor Homeowners Association provided comments regarding Transco's proposed mitigation projects for air quality impacts, stating that at least two of Transco's proposed projects may overlap with projects that the Port Authority of New York and New Jersey has already begun implementing or committed to funding, which may indicate that these projects are being double-counted.	In its August 22, 2018 filing, Transco provided preliminary agreements from mitigation project proponents as part of its Air Quality Mitigation Plan and, as indicated in our September 18, 2018 Draft General Conformity Determination, provided a list of mitigation projects that Transco is currently negotiating. At this time, the mitigation projects in cooperation with the Port of New York and New Jersey are listed as "low" probability of implementation and were not included on our Draft General Conformity Determination. Further, Transco would be required to demonstrate that its mitigation projects would result in unique reductions and would be implemented prior to construction; thereby avoiding double-counting of reductions. Finally, Transco is prepared to purchase emission reduction credits to offset construction NOx emissions to cover any NOx emissions not covered by mitigation projects.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
AIR-10	The NYSDEC commented that it may provide additional comments after its review of the draft General Conformity Determination, and would continue to work with the EPA, NJDEP, and Transco regarding the development of appropriate emission mitigation projects.	Comment noted.
AIR-11	The NJDEP provided comments regarding potential sources of construction emissions that should be addressed in the draft General Conformity Determination depending on potential changes in construction equipment or techniques, as well as comments on Transco's Air Quality Technical Report.	Transco provided detailed construction emissions in its revised Air Quality Technical Report, filed August 21, 2018, which includes emissions estimates for material/pipe transport and all construction activity within the NJ-NY-CT Interstate AQCR. The Draft General Conformity Determination issued September 18, 2018 further addresses NJDEP's comments.
AIR-12	The EPA provided comments regarding information that should be provided in the draft General Conformity Determination.	Comment noted and addressed in the Draft General Conformity Determination issued September 18, 2018.
AIR-13	Describe how operational emissions would remain under the legal requirements.	Section 4.10.1 discusses potential-to-emit emissions from Compressor Station 206, mitigation measures Transco would install, and NJDEP air permitting requirements the station must meet. Transco received its preconstruction air permit from the NJDEP on September 7, 2017.
AIR-14	Comments related to our discussion of HAPs emissions at Compressor Station 206, and the revised NJDEP HAPs reporting thresholds.	On February 12, 2018, the NJDEP amended its <i>Control and Prohibition of Air Pollution by Toxic Substances and Hazardous Air Pollutants</i> regulations and reduced reporting thresholds for numerous HAPs; however, Transco received its preconstruction air permit for Compressor Station 206 on September 7, 2017, prior to this rule taking effect, and the new thresholds do not apply retroactively.
AIR-15	The Environmental Sciences and Energy Consulting report (submitted by the Township of South Brunswick and the NY/NJ Baykeeper; Food and Water Watch; Central Jersey Safe Energy Coalition; and Princeton Manor Homeowners Association) expressed concern regarding NOx emissions and ozone pollution and contends that Transco has not provided information to demonstrate that NOx emissions would be mitigated, and that our analysis should consider NOx emissions as a significant impact.	Transco would mitigate all construction-related NOx emissions within the NJ-NY-CT Interstate AQCR. As described in the final General Conformity Determination, we recommend that the Commission include conditions in any authorization it may issue that include enforceable measures to ensure that Transco's mitigation projects are in place and generating offsets prior to construction. Transco would track construction emissions and mitigation project emissions reductions, and provide these reports to FERC, EPA, NYSDEC, and NJDEP. Lastly, should Transco not be able to generate sufficient offsets through direct mitigation projects, we have verified that there are more than enough ERCs available to cover the worst-case construction emissions scenario, if necessary.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
AIR-16	Commenters expressed concern regarding the cumulative impacts of odors from Compressor Station 206 combined with existing odors from a nearby sewage treatment plant.	As discussed in section 4.10.1.6, Transco would utilize deodorization facilities for planned blowdowns. A filter, typically an activated-carbon filter cartridge, would remove odorants from the natural gas. Pipelines and compressor stations transporting odorized gas do not typically result in significant odor when operated properly, although minor and temporary odors during deodorizer replacement and maintenance may occur.
AIR-17	Comments related to emissions from Compressor Station 206, including concern that mitigation offsets would not benefit the area around the compressor station.	Transco is required to fully mitigate NOx emissions within the same AQCR where General Conformity is triggered (NJ-NY-CT Interstate AQCR). Benefits would be realized within the AQCR, which includes Compressor Station 206.
AIR-18	Comments regarding existing air quality conditions at the Compressor Station 206 site, including comments that air sampling was inadequate, and that our assessment did not take into account emissions from the Trap Rock quarry.	As discussed in section 4.10.1, Transco used air quality data from EPA-approved monitors managed by state and/or tribal agencies that are near the NESE Project facilities or are representative of the surrounding air quality, as required by EPA. Based on modeling results, the emissions from the new compressor, when combined with the existing background levels, would meet the NAAQS, which were established by the EPA to be protective of human health, including children, the elderly, and sensitive populations.
AIR-19	The Mayor of Montgomery Township provided comments regarding the status of Transco's NJDEP air permit. The Mayor stated that the draft EIS did not provide details regarding the status of Transco's application or response from the NJDEP.	Transco received its preconstruction air permit from the NJDEP on September 7, 2017.

Noise

NOISE-1	General comments expressing concern about noise during operation of Compressor Station 206, including potential noise-related health impacts. Some commenters also suggest sound barriers or walls could be installed to block noise from nearby residences.	Section 4.10.2.2 includes our analysis of operational noise from Compressor Station 206, which explains that the noise levels from Compressor Station 206 would be below the FERC requirement of 55 dBA, L_{dn} at the nearest NSA. In addition, the noise increase at any NSA would be below 1 dBA, which is not perceptible by the human ear. We recommend the Commission require Transco to file a post-construction noise survey with the Commission to ensure noise levels at nearby NSA's are below 55 dBA.
NOISE-2	Comments related to operational noise at Compressor Station 206, including noise from blowdowns. Commenters state that our recommendation to install additional noise controls within 1 year of the in-service date if the operational noise exceeded our requirements would result in noise disruption for too long. Commenters also expressed concern that, once the compressor	Section 4.10.2.2 includes our analysis of operational noise from Compressor Station 206, including blowdowns. Noise from Compressor Station 206 would be below 55 dBA, L_{dn} at the nearest NSAs. If noise exceeds this level, we recommend that Transco install mitigation within 1 year to meet 55 dBA. If noise from Compressor Station 206 is excessive, FERC maintains the right to

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	station is completed and operational, noise mitigation would not be feasible if the operational noise exceeds our requirements. In addition, commenters state that noise from the compressor station would exceed the NJDEP noise regulations.	require reduced operation to ensure the station meets 55 dBA, L_{dn} until additional mitigation is installed (while maintaining safe operations). Ultimately, Transco must meet 55 dBA, L_{dn} at Compressor Station 206. Finally, as shown in table 4.10.2-5, noise levels from Compressor Station 206 would comply with NJDEP noise requirements of 50 dBA at the nearest NSA property line.
NOISE-3	Comments regarding the sound levels used in our analysis. One commenter states that average sound levels are not appropriate and that peak sound levels should be used.	As discussed in section 4.10.2.1, noise levels are penalized 10 dBA due to human ear sensitivity during nighttime hours. Therefore, the noise levels presented are conservative estimates. Further, we recommend that Transco file post-construction noise surveys to ensure compliance with our noise requirements.
NOISE-4	Commenters expressed concern regarding noise from blowdown events at Compressor Station 206 and contend that our analysis of blowdown noise was not adequate. Commenters also expressed concern regarding health impacts from operational noise, including blowdown events. In addition, commenters expressed concern regarding noise impacts on the NJBVMC and the planned meditation trail, including impacts from unsilenced blowdown events. Commenters also stated the noise levels associated with the blowdown events would exceed NJDEP noise regulations. Regarding mitigation of blowdown events, commenters stated that silencers should be permanently installed and be used for both planned and unplanned events. One commenter also stated that advance notification of planned blowdown events is not adequate mitigation for the noise generated during the event.	Impacts on the NJBVMC are discussed in detail throughout section 4.10.1. We conclude that noise from Compressor Station 206 would not have a significant impact on the NJBVMC or its planned meditation trail during construction or operation of Compressor Station 206. Unsilenced blowdown events are rare and occur during emergencies, in which safety is of utmost concern. As discussed on section 4.10.2.2, Transco would provide prior notification for planned blowdowns, which we find acceptable. Further, as stated in section 4.10.2.1, The L_{dn} calculation, used by FERC, takes into account the time of day and duration the noise is encountered. In calculating the L_{dn} , late night and early morning noise exposures are increased by 10 dBA to account for people's greater sensitivity to sound during nighttime hours. Due to the 10 dBA nighttime penalty added prior to calculation of the L_{dn} , for a facility to meet the 55 dBA L_{dn} limit the facility must be designed such that the constant 24-hour noise level does not exceed an L_{eq} of 48.6 dBA at any NSA. This would be below the NJDEP required noise levels. Health impacts resulting from compressor station noise, such as low-frequency noise, is addressed in section 4.10.2.2. We conclude that there is no evidence of widespread low-frequency noise from natural gas transmission pipeline facilities inducing noise effects on local residences.
NOISE-5	Comment related to noise impacts during operation of Compressor Station 200, and that noise from the compressor station would exceed the East Whiteland Township's noise regulations.	As demonstrated in sections 4.10.2.1 and 4.12.2.2, and table 4.10.2-4, the noise from Compressor Station 200 would meet FERC requirements, which are more stringent than East Whiteland Township requirements. In addition, the anticipated noise increase from Compressor Station 200 at nearby NSAs would be less than 0.5 dBA, which is below the human threshold of hearing.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
NOISE-6	Chester County requested that it be provided a copy of the results of operational noise surveys completed at Compressor Station 200 and noted the East Whiteland Township Noise and Nuisance portion of the township code.	The most recent post-construction noise survey for Compressor Station 200 can be found under Docket No. CP15-527-000, Accession Nos. 201805045168 and 201805045169.
NOISE-7	The Chester County Planning Commission requested that Transco provide the results of the noise surveys that we have recommended at Compressor Station 200 to East Whiteland Township, so the Township can respond to residents who contact them with questions or concerns.	A post-construction noise survey for Compressor Station 200 would be filed publicly on the FERC eLibrary website under the NESE Project Docket No. CP17-101. Chester County officials may check the FERC docket or contact Transco to arrange direct receipt of the report.
Reliability and Safety		
SAFE-1	Commenters expressed concern regarding potential incidents along the pipeline and compressor station facilities, including impacts of natural gas leaks. Commenters also expressed concern regarding the potential for leaks to ignite and subsequent impacts on nearby residences, communities, and the environment.	Section 4.11.1 states that the DOT requires operators to develop and follow a written Integrity Management Program that address the risks on each transmission pipeline segment. The rule specifically requires operators to establish an Integrity Management Program to minimize the potential for an accident in all high-consequence areas (HCA), where an accident could do considerable harm to people and their property. In addition, sections 4.8.4 and 4.11.1 discuss elements of Transco's emergency response plan and coordination with local first responders in the event of an emergency.
SAFE-2	One commenter stated that the population data in table 4.8.2-1 should be updated, and that the High Consequence Area designations for the Project could be affected by the data in the table.	Population estimates are derived from the most recent data from the U.S. Census Bureau. In addition, as stated in section 4.11.1, Transco designed its pipeline facilities at higher Class locations than required by PHMSA. Higher Class locations translate to increased safety design measures.
SAFE-3	Comments regarding the process of reevaluating DOT class locations and HCAs. Specifically, the commenter asked if the DOT would reassess the existing pipeline, and expressed concern that the existing pipeline would need to be replaced with the class location or HCA status changed.	As stated in section 4.11.1, Transco designed its pipeline facilities at higher Class locations than required by PHMSA. Higher Class locations translate to increased safety design measures. However, if the DOT Class location requirements change, resulting in the re-designation of Transco's pipelines to a higher Class location than the currently designed for, Transco would be required to meet the new standards.
SAFE-4	Comments related to Transco's existing pipelines, including comments that the age of the existing pipelines make them vulnerable to incidents due to the increase in pressure. Commenters also mentioned the maximum allowable operating pressure in the pipeline downstream from Compressor Station 206 and the potential that the existing pipeline cannot accommodate that pressure. Commenters further contend that the increase in	Section 4.11.2 discusses the existing pipelines downstream of the proposed Compressor Station 206. As stated in the EIS, although within Class 1 and 2 areas, Transco designed the existing pipelines to meet Class 3 standards as an increased safety precaution. The MAOP for the downstream pipelines is currently 800 pounds per square inch and would remain so after construction of the NESE Project. In addition, Transco hydrostatically tests its pipelines at 1.5

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	velocity and pressure from the addition of Compressor Station 206 would result in an increase speed of corrosion in the pipeline due to the higher velocity of the natural gas (both in the vicinity of Compressor Station 206 as well as along Transco's entire system to the Rockaway Transfer Point). In addition, commenters contend we should require additional information from Transco to identify measures it would implement to design and operate the pipeline to mitigate potential effects of increased corrosion, and some commenters requested that the existing pipeline be evaluated/assessed to ensure the integrity of the system.	times the MAOP to ensure safety and performs internal inspections as required by DOT regulations. Transco typically limits the flow of gas through its pipelines to 60 feet per second. Based on corrosion prevention and remediation measures described in section 4.11.2, the flow of gas along the discharge pipelines at Compressor Station 206 is not anticipated to increase corrosion within the pipeline beyond what is typically experienced. Section 4.11.2 has been revised to further address pipeline corrosion concerns.
SAFE-5	Comments requesting that the draft EIS identify the potential blast radius for Compressor Station 206 and for the pipeline near the new station. In addition, one commenter expressed concern regarding the potential impact radius associated with an incident at the compressor station, and subsequently the two existing pipelines, and asked if that radius had been calculated.	As stated in section 4.11.2, the potential impact radius at Compressor Station 206 would be 820 feet, based on the MAOP and diameter of the suction and discharge pipelines.
SAFE-6	Commentors contend that the rate of pipeline incidents during the 2000s exceeds the level of incidents on pipelines that were constructed in the 1940s, and speculate that there are problems with construction methods or materials; monitoring for corrosion or pipeline integrity issues; and/or oversight by federal and state agencies (e.g., that PHMSA is understaffed). In addition, commenters contend we should require additional information from Transco to identify measures it would implement to design and operate the pipeline to mitigate potential effects of increased corrosion.	Pipeline incidents, causes, and consequences (injuries/fatalities) are discussed in section 4.11.2. The types of incidents must be considered when assessing pipeline incidents over any timeframe. As discussed in section 4.11.12, one major cause of pipeline incidents on older lines involve corrosion; however, the advent of technology such as "smart pig" inline inspection tools allow for increased/advanced pipeline monitoring. Contrary to commenters' belief, PHMSA indicates that older pipelines (circa 1940s and 1950s) are more dangerous to operate due to the use of materials such as bare (uncoated) steel and iron, both having higher potential for corrosion.
SAFE-7	One commenter stated that the use of double-walled pipe would increase the safety of the Project.	As discussed in section 4.11.1, to ensure the safety of the Project, Transco would meet or exceed the DOT's requirements at 49 CFR 192.
SAFE-8	Comments related to the role of the DOT, PHMSA in ensuring pipeline safety, including comments that PHMSA would not have jurisdiction until the Project is already in operation. Commenters also expressed concern regarding enforcement of safety regulations, and PHMSA staffing. One commenter also expressed concern that the DOT did not participate as a cooperating agency for the preparation of the EIS.	The Commission issues an open invitation to federal agencies who wish to cooperate; however, participation is not a requirement. As stated in section 4.11.1, the Commission's regulations require applicants to certify that projects under our jurisdiction would be designed, constructed, and operated in accordance with DOT specifications, which are specifically designed to protect pipeline operators and the public. Enforcement of DOT pipeline safety regulations would be under PHMSA's jurisdiction. PHMSA enforcement or staffing are outside the scope of our NEPA review.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
SAFE-9	Some commenters state that New Jersey regulations require additional safety measures above the DOT's requirements (e.g., thicker pipe).	Section 4.11.1 addresses Class locations. While the New Jersey requirements apply to intrastate pipelines (not the interstate pipelines proposed as part of this Project), Transco would design the Project pipelines to higher, more stringent Class location standards than required by the DOT.
SAFE-10	Comments related to Williams'/Transco's safety record, including the potential increase for safety incidents. In addition, some commenters contend that the history of a company's safety record should be taken into consideration for our analysis. Some commenters also cited as an example that Transco recently used the horizontal direction drill method during construction of the Atlantic Sunrise Project without authorization from the FERC.	The Commission reviews each project on its own merit. As stated in section 4.11.1, the Commission our regulations require applicants to certify that projects under our jurisdiction would be designed, constructed, and operated in accordance with DOT specifications, which are specifically designed to protect pipeline operators and the public. During construction, should Transco not comply with the conditions of its Certificate, the Commission reserves stop-work and/or address the issue on a case-by case basis. Unrelated, previous projects or incidents have no bearing on the current proceeding.
SAFE-11	Comments related to activities at the Trap Rock Quarry and the potential for blasting at the quarry to impact Compressor Station 206 and the existing pipelines. In addition, several commenters contend that our conclusions in the draft EIS are not adequate regarding potential safety impacts at Compressor Station 206 because the cumulative impacts of blasting at the quarry over the next decades was not analyzed. In addition, the commenters state that information pending from Transco regarding foundation design should have been used in our analysis, and after the pending data is received the draft EIS should be reissued for public comment. One commenter's concern was also related to their belief that the compressor station would be located within the Trap Rock property where blasting occurs.	Section 4.11.4 discusses the potential for blasting at Trap Rock quarry to damage Compressor Station 206, resulting in a potential public safety incident. As explained in the EIS, the compressor building would be at least 0.4 mile from blast events in the quarry, which occur approximately once per week. The EIS also describes the detailed vibration study that Transco conducted at the compressor station site while blasting was being conducted and found that the level of blasting-induced vibration at the compressor station would be well below the level of vibration that would trigger an automatic shut-down of the compressor units. Regarding the potential for cumulative effects of this infrequent, low level of vibration, the EIS explains that each compressor unit would include 16 vibration monitors which would trigger an automatic shut-down of the unit if vibrations are detected in excess of manufacturer specifications for safe operation. Therefore, the vibration monitors would be monitoring for cumulative effects of vibration from all sources, including blasting at the Trap Rock quarry. Transco further committed to incorporate the results of the vibration study in its final foundation designs and we have recommended that any Order that may be issued by the Commission authorizing the NESE Project require Transco to file the final foundation designs, stamped and sealed by the professional engineer-of-record in New Jersey. Transco would be required to meet this condition prior to receiving a Notice to Proceed with construction. Based on the above summary and as more fully discussed in the EIS, we restate our conclusion

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		that Compressor Station 206 would be adequately protected from future blasting activity at the Trap Rock quarry.
SAFE-12	Comments related to safety during construction, including the combined construction techniques of offshore dredging and HDD installation.	As described in section 4.12.3.13, as required by OSHA under 29 CFR 1910 and 1926, all construction employees (onshore and offshore) would receive safety and environmental training prior to entering the right-of-way. Transco has an existing offshore pipeline in the Raritan Bay and would likely hire experienced contractors to conduct the offshore dredging and HDD operations.
SAFE-13	One commenter expressed concern that the EIS does not address safety training for workers for the offshore portion of the project.	See the response to comment SAFE-12.
SAFE-14	Some commenters expressed concern that Compressor Station 206 could affect, or be affected by, a nearby police firing range.	According to the New Jersey Department of Law and Public Safety, shooting ranges should be designed with both impact berms, intended to receive fired rounds, and side berms, which serve to stop any misdirected rounds. Side berms should be at least 8 feet tall and extend from the impact berm to the maximum shooting distance. These design requirements are intended to prevent misdirected rounds from leaving the site.
SAFE-15	Concerns regarding coordination with local emergency response providers, and the ability of local emergency response providers to respond to an incident during operation of the Project. In addition, commenters expressed concern regarding how the public would be notified in the event of an emergency.	Sections 4.8.4 and 4.11.1 discuss elements of Transco's emergency response plan and coordination with local first responders.
SAFE-16	Comments regarding the potential for residences or residential areas to be isolated in the event of a pipeline or compressor station incident. Commentors contend that residents would be unable to evacuate, and emergency response officials would be unable to access the residents. Some commenters also noted that the road from the Princeton Manor neighborhood exits onto Rt. 27 south of the Compressor Station 206 site and, therefore, would initially direct traffic toward a fire.	As stated in section 4.11.1, Transco would work with local emergency officials to determine response procedures for remote residential areas with limited entry and exit routes. Transco would also conduct site-specific training and operator-simulated emergency exercises for local first responders and would use all available and relevant means to support local emergency personnel in the event of an incident involving any of the Project facilities.
SAFE-17	Comments regarding operational staffing and monitoring of the Project facilities, including leak detection monitoring. Commenters also expressed concern that Compressor Station 206 would be understaffed, which would result in an incident, or a delayed response to an incident. In addition, one commenter stated Transco does not have a method to clean up an area following an accident.	As discussed in section 4.11.5, in addition to onsite personnel during business hours, Transco would monitor the station remotely 24 hours per day/7 days per week from its Gas Control facility.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
SAFE-18	Commenters identified an unexploded munitions/ordnance site in Sayreville, New Jersey (near Eisenhower Elementary School), and asked what plans would be implemented to prevent incident during construction.	Eisenhower Elementary School is approximately 0.3 mile northwest of the proposed pipeline alignment. The area surrounding the proposed Madison Loop is heavily developed and consists of residential and commercial developments, as well as various public roadways. The Madison Loop would be collocated with existing Transco pipelines for the entirety of its length. For these reasons, we anticipate that encountering unexploded munitions during construction of the Project would be unlikely. During construction of the Project, Transco would be held to the safety measures outlined by the DOT, as described in section 4.11.1.
SAFE-19	Comments regarding the potential for anchor strikes to impact the offshore pipeline, and that the offshore pipeline depth may not be sufficient to avoid impacts.	We disagree. The offshore pipeline burial depth would range from 4 to 15 feet, as required by the USACE, which considered the potential for anchor strikes in determining the required burial depths for the pipeline.
SAFE-20	Potential safety impacts on the offshore pipeline from ship traffic. In addition, comments related to the safety of the offshore pipeline in the event of earthquakes and seafloor erosion.	The offshore pipeline burial depth would range from 4 to 15 feet, as required by the USACE. Section 4.1.4.1 describes seismicity in the Project area and concludes that the potential for a damaging earthquake in the area is low. Section 4.11.2 states that Transco would utilize the results of its sediment transport model in combination with post-construction survey to verify that adequate burial depth is maintained over the subsea facilities and would use the results of year-over-year post-construction surveys to develop an offshore pipeline inspection schedule for the operating life of the Project.
SAFE-21	Comments regarding the safety and integrity of the offshore pipeline in the event of hurricanes.	As stated in section 4.11.2, 49 CFR 192.317 requires that pipeline operators take all practicable steps to protect the pipeline from hazards (e.g., flooding, landslides, ship anchors, and hurricanes). In addition, the offshore pipeline would be buried at a depth of 4 to 15 feet. In addition, as stated in section 4.11.2, Transco has designed the Raritan Bay Loop and ancillary offshore facilities to operate in the saltwater environment of Raritan Bay and Lower New York Bay, and to accommodate potential stresses associated with tropical storm events.
SAFE-22	Comment regarding the potential for accelerated corrosion along the Raritan Bay Loop from the offshore environment.	As discussed in section 4.11.2, the onshore and offshore pipelines would be cathodically protected to reduce corrosion. Transco would also monitor and assess its pipelines using "pigs" and internal/external protective coatings.
SAFE-23	Comments regarding potential terrorist attacks on the Project facilities, including internet security.	Section 4.11.5 addresses the potential or a terrorist attack to impact the Project facilities. We conclude that, while there is a risk, the

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		unpredictable possibility of such acts does not support a finding that this particular Project should not be constructed.
Cumulative Impacts		
CI-1	Comments related to the present and future actions listed in table 4.12.1-3. One commenter stated that The Pointe at Sayreville, listed as a planned action in the cumulative impacts analysis in section 4.12, is no longer proposed and has been replaced by a new project called Riverton. One commenter stated that the EIS should assess the cumulative impacts of proposed offshore oil and gas exploration development, and offshore wind energy projects in the Project area. In addition, the Chester County Planning Commission stated there are other pipeline projects near Compressor Station 200.	<p>Table 4.12.1-3 has been revised to reflect the information about the Riverton development. Based on our research, no offshore oil and gas exploration activities or offshore wind projects would occur within the geographic scope for cumulative impacts, as defined in section 4.12.1.</p> <p>Regarding other pipeline projects near Compressor Station 200, the Pennsylvania Pipeline/Mariner East II Project listed in table 4.12.1-3 is the project referred to by the commenter (see also the response to comment GEO-3). As discussed in section 4.1.4.3, Transco stated that there are no karst features within footprints of buildings at Compressor Station 200 and that the facility, which was constructed over 50 years ago, has not been affected by karst activity or other geologic hazards.</p>
CI-2	Comments related to gas extraction activities and associated risks and leaks, as well as comments related to downstream effects of natural gas use.	The NESE Project would not involve gas extraction activities. Section 1.3 addresses comments that we received recommending that environmental impacts associated with natural gas production, including the practice of hydraulic fracturing (fracking), be evaluated in our review.
CI-3	Comments regarding potential future projects by Transco, and abandonment of the Project facilities. One commenter states that Transco may be planning for future expansions due to the size of the parcel on which Compressor Station 206 is located. Another commenter states that the draft EIS does not discuss abandonment procedures, and asks about potential impacts from natural gas that would be left in an abandoned pipeline. A third commenter stated that the future abandonment of the offshore pipeline would contribute to sea level rise.	Section 4.12.1.1 addresses potential future expansion or abandonment plans.
CI-4	One commenter stated that our analysis of cumulative air quality impacts should include impacts from Compressor Station 205.	Our cumulative impacts analysis considers present and reasonably foreseeable projects. Ambient air concentrations of criteria pollutants near the Compressor Station 206 site were taken from air quality monitors with data provided on EPA's AirData website. These monitors, sited in accordance with EPA guidelines, are in locations nearest to the site or that are most representative of air quality near the site, and include existing emissions sources, providing cumulative air quality data for existing sources. Because

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Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		Compressor Station 205 is an existing source in the Project area, the associated emissions are included in any baseline air quality data.
CI-5	The NJDEP provided comments on section 4.12.3.3 regarding Project effects on groundwater, and stated that groundwater impacts beyond the local water table could occur.	Our analysis of cumulative impacts was based on the potential geographic scope of impacts on each resource, as described in section 4.12.1.
CI-6	Comments that our assessment of the significance of wetland and forest impacts was diminished because we compared them to the extent of similar resources on a sub-watershed scale.	We disagree. Our analysis of cumulative impacts was based on the potential geographic scope of impacts on each resource, as described in section 4.12.1. The analysis of Project-specific impacts on wetlands and forested land is presented in sections 4.3.4 and 4.4, respectively.
CI-7	Potential future contamination impacts on the reservoir proposed for the Trap Rock Quarry site in 2045, and comments that the cumulative contamination from the Compressor Station 206 site should be assessed.	As discussed in section 4.7.4, we conclude that operation of Compressor Station 206 would not pose a significant concern to potential future use of the Trap Rock Quarry site.
CI-8	One commenter provided comments regarding other past and current Transco projects in the region. The commenter expressed concern regarding cumulative leakage from each project, as well as stating that there was no validation of actual delivery from each project for specific contracts.	See the responses to GEN-2 and SAFE-10.
CI-9	Comments related to climate change, including comments that the Project will contribute to climate change, sea level rise, and extreme weather events, and subsequently impact other environmental resources, marine wildlife, tourism and commercial economies, etc. In addition, commenters contend we did not adequately assess the GHG emissions that would result from the Project, that compressor stations leak more methane than pipelines, and that our conclusions regarding climate change are not adequate. Commenters also cite increased climate change risks from gas sourced from shale formations, as well as stating that methane is initially a more potent GHG than CO ₂ after release into the atmosphere. In addition, some commenters state that the Project would be incompatible with New York State's goals to address climate change.	<p>Climate change impacts in the northeast U.S. are discussed in section 4.12.4. Climate change is a global phenomenon and emissions in one location translates to impacts globally. The impacts associated with GHG emissions from the Project cannot be directly correlated to specific impacts (e.g., one cannot state that 10,000 tpy of CO₂e from the Project would result in increased storms in Iowa); however, the EIS does state the nature and extent (where possible) climate change impacts that are anticipated to occur in the Project region (i.e., the northeastern region of U.S.) by research bodies such as the IPCC and USGCRP, based on GHG emissions scenarios. The EIS also states that the GHG emissions from the Project would contribute to these impacts; however, to what degree is unknown.</p> <p>As discussed in section 4.10.13, the NSPS issued on May 16, 2016 include a leak monitoring/repair provision. Compressor station owners/operators are required to develop a leak monitoring plan and use optical gas imaging to conduct leak surveys.</p> <p>Commenters state that methane is a more potent GHG. As explained in section 4.10.1-1, this is accounted for in the EIS through</p>

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		the use of carbon dioxide equivalents and global warming potentials for GHG emissions. Section 4.12.4 describes how the Project would align with New York State climate change and GHG reduction goals.
CI-10	Comment that Transco should offset the emissions from the burning of natural gas that would also be a new source of greenhouse gases.	Currently, there is no regulatory framework or requirement to offset GHG emissions. Transco would comply with all applicable air quality regulations during construction and operation of the Project, including reporting GHG emissions resulting from operation of Compressor Station 206.
CI-11	The NYSDEC provided comments regarding the discussion of climate change in section 4.12.4. The NYSDEC stated that the section is inadequate because it "fails to fully or properly assess GHG emissions associated with" the Project, including upstream and downstream emissions. In addition, the NYSDEC stated that even without considering or quantifying upstream or downstream GHG emissions, it considers the construction and operational GHG emissions from the Project to be significant, including the estimated CO _{2e} emissions from Compressor Station 206. The NYSDEC also stated that the final EIS should discuss alignment with New York State GHG reduction policy and the significance of the projected GHG emissions from the Project, mitigation actions to reduce GHG emissions, and the potential significance of climate change impacts on the proposed Project.	Our analysis in section 4.12 is consistent with FERC style, formatting, and policy regarding NEPA evaluation of different types of impacts, including cumulative impacts.
CI-12	Comment that our analysis of climate change should determine significance using the Social Cost of Carbon metric.	The social cost of carbon tool is intended for estimating the climate costs and benefits of rulemakings and policy alternatives. The tool cannot predict the actual environmental impacts of a project on climate change. It can only present a monetized global value for the economic costs of climate change.

Comments on the Draft General Conformity Determination

GCD-1	Purchasing emission reduction credits is not an acceptable form of mitigation compared to direct mitigation.	We disagree. As discussed in section 4.1.2.2 of the final General Conformity Determination, purchasing emission reduction credits (ERCs) or Creditable Emissions Reductions (CERs) complies with General Conformity regulations as implemented by the EPA and enforced by the New York and New Jersey State Implementation Plans (SIPs).
GCD-2	The Commission should reject the Project due to air quality impacts, specifically the properties of nitrogen oxides, which are	The commenter misstates the impacts of nitrogen oxides (NO _x). First, as stated in the final General Conformity Determination, NO _x is

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	greenhouse gases and have an atmospheric lifetime of 110 years, and also deplete the ozone layer and cause acid rain.	a combination of nitric oxide (NO) and nitrogen dioxide (NO ₂), which are not greenhouse gases. Nitrous oxide (N ₂ O) is a greenhouse gas, but is not considered NO _x . Further, NO _x emissions contribute to ground level ozone formation, not the depletion of the ozone layer. Finally, while the final General Conformity Determination acknowledges that NO _x emissions combine with water and ammonia to form acid rain, acid rain formation is not regulated under General Conformity and is not evaluated in this determination. However, through mitigation of NO _x emissions under General Conformity to a net zero emission increase, NO _x as a precursor to the formation of nitric acid/acid rain would be similarly mitigated.
GCD-3	Mitigation is not an adequate means to reduce impacts and Transco should focus on renewable, clean energy.	As discussed in sections 4.1.1 and 4.1.2 of the final General Conformity Determination, mitigation of NO _x emissions, whether through direct mitigation or through purchasing offsets, is consistent with the New York State and New Jersey SIPs and complies with the General Conformity regulations. Alternatives, including renewable energy options, are beyond the scope of a final General Conformity Determination. We refer the commenter to section 3.0 of the final EIS which does address alternatives.
GCD-4	Transco proposes mitigation projects and ERC purchases as mitigation strategies. Before deeming these strategies "similarly enforceable measures," FERC should follow EPA guidance in ensuring that mitigation measures are: (1) independently verifiable, (2) a schedule to implement and verify approved measures should be adopted by the agency or project proponent, (3) violations of mitigation measures are practically enforceable in accordance with the Clean Air Act, and (4) liability for violations can be identified.	FERC consulted with the EPA regarding the mitigation strategies proposed by Transco. As described in the final General Conformity Determination, we recommend that the Commission include conditions in any authorization it may issue that include enforceable measures to ensure that Transco's mitigation projects are in place and generating offsets prior to construction. Transco tracks construction emissions and mitigation project emissions reductions, and provides these reports to FERC, EPA, NYSDEC, and NJDEP. Further, FERC retains authority to take whatever steps are necessary to ensure the protection of life, health, property, and environmental resources during construction and operation of a project, including stop work authority. Also, the General Conformity regulations include provisions to reevaluate conformity should actual emissions exceed estimated emissions by an applicability threshold. Lastly, should Transco not be able to generate sufficient offsets through direct mitigation projects, we have verified that there are more than enough ERCs available to cover the worst-case construction emissions scenario, if necessary.
GCD-5	The timing of Transco's mitigation measures is vital under General Conformity regulations. FERC staff appears to be aware of this as they recommend that "the Commission include a condition to any	Comment noted.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	authorization for the NESE Project that would ensure that Transco's proposed mitigation projects are in place, and/or ERCs and CERs have been purchased, prior to the start of construction of the NESE Project." The Commenter supports this recommendation.	
GCD-6	<p>"Prior to determining that a federal action is in conformity, the federal agency making the conformity determination must obtain written commitments from the appropriate persons or agencies to implement any mitigation measures which are identified as conditions for making conformity determinations" (40 CFR 93.160(b)).</p> <p>The draft General Conformity Determination states that Transco must have firm commitments from the project proponents at the time the final General Conformity Determination is issued. To-date, Transco has only provided letters of intent and no firm agreements.</p>	<p>Transco filed an executed MOA with the New Jersey Motor Trucking Association on December 6, 2018, which can mitigate over 600 tons of NO_x. This MOA fulfills our requirement that Transco ensure that mitigation projects are available for funding, represent true emissions reductions, and would be implemented and begin generating offsets prior to the start of construction. Transco also continues to work towards execution of an MOA with the NJ TRANSIT for the Bus Electrification and Support Systems for New Dual Mode Locomotives mitigation projects.</p> <p>In addition, as identified in the final General Conformity Determination and through Transco's supplemental filings, Transco has committed to purchase ERCs/CERs for any emissions not directly mitigated through mitigation projects.</p>
GCD-7	<p>Prior to issuance of the final General Conformity Determination, Transco must provide a written commitment to purchase ERCs if they prove necessary. At this point, Transco has only made vague assurances. We urge FERC to provide evidence of written commitments that Transco would purchase ERCs in the final General Conformity Determination.</p>	<p>As discussed in section 4.1.2 of the final General Conformity Determination, Transco has prioritized direct mitigation over the purchase of ERCs. However, Transco has identified the availability of enough ERCs to fully offset the NESE Project, and we have verified this information. As indicated in section 4.2 of Transco's Air Quality Mitigation Plan (AQMP), Transco would utilize ERCs, as needed, to offset its NO_x construction emissions. We agree with this approach. Additionally, section 4.1.3 of the final General Conformity Determination recommends that the Commission include a condition to any Project authorization that would ensure that Transco's proposed mitigation projects are in place, and/or ERCs and CERs have been purchased. Prior to issuing a <i>Notice to Proceed with Construction</i> of the Raritan Bay Loop, FERC staff would verify that direct mitigation projects were completed and operational, and, if necessary, that any ERCs and CERs purchased by Transco were certified and approved by the state(s).</p>
GCD-8	<p>The NYSDEC states that Transco cannot commence construction of the Project in New York unless and until it obtains its Water Quality Certification under section 401 of the Clean Water Act from the NYSDEC.</p>	<p>Comment noted. This comment is inapplicable to the final General Conformity Determination.</p>
GCD-9	<p>The NYSDEC prefers direct mitigation (Tier 1 Mitigation) over the purchase of ERCs (Tier 2 Mitigation).</p>	<p>Section 4.1.3 of the final General Conformity Determination has been revised to note this preference, but also explains that there are</p>

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		insufficient viable Tier 1 direct mitigation projects to cover all emissions that would need to be mitigated under General Conformity. The final General Conformity Determination explains that Transco would need to also obtain some ERCs/CERs. See also response to comment GCD-1.
GCD-10	The draft General Conformity Determination states that there are no recent relevant revisions to the New York SIP. This is incorrect and should reference that in November 2017, DEC submitted the "New York State Implementation Plan for the 2008 Ozone National Ambient Air Quality Standards, New York-N. New Jersey-Long Island, NY-NJ-CT Nonattainment Area" to EPA for review and approval.	Section 4.0 of the final General Conformity Determination has been revised to include recent revisions to the New York SIP.
GCD-11	The State of New Jersey submitted its SIP to EPA, but the submission has not been approved as of this writing.	Section 4.0 of the final General Conformity Determination has been revised to state that the final SIP revision was submitted to EPA on January 2, 2018 and is currently under review.
GCD-12	NYSDEC recommends that: (1) paragraph 2 in section 4.1.2.1 should be moved to the Tier 2 discussion in section 4.1.2.2; (2) the addition of "in the ozone transport region" after the word "state" in the second sentence in this paragraph; and (3) the sentence and accompanying footnote referencing the New York and New Jersey reciprocity agreement be deleted as that agreement has expired.	Sections 4.1.2.1 and 4.1.2.2 of the final General Conformity Determination have been revised to include these changes.
GCD-13	The mitigation projects and ERCs will be insufficient to achieve improved air quality within the nonattainment area for Compressor Station 206.	As identified in section 2.2 of the final General Conformity Determination, the General Conformity process exempts a review of new sources or existing source modifications that are subject to state or federal New Source Review (NSR) permitting because these sources are presumed to comply with the SIP by completing the applicable air permitting process with the jurisdictional agencies. Emissions resulting from operation of Compressor Station 206 have been permitted by the NJDEP and are not subject to General Conformity. Further, as discussed in section 4.1.2.2 of the final General Conformity Determination, implementing mitigation projects and/or purchasing ERCs or CERs are acceptable methods of demonstrating conformance under the New York and New Jersey SIPs.
GCD-14	The draft General Conformity Determination included recommendations to be included in any Commission authorization, including: (a) sharing emissions tracking data with the regulatory agencies; (b) developing a more detailed plan to collect relevant fleet information for mitigation projects; (c) ensuring mitigation	Comment noted.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
	projects are in place or ERCs/CERs are purchased prior to the start of construction, and (d) requiring scrappage for drayage truck replacements. The EPA strongly encourages the Commission to include these recommendations as conditions in its approval of the Project.	
GCD-15	EPA supports the tiered approach to prioritize mitigation projects above the purchase of credits to meet General Conformity obligations. The EPA also suggests an interpretation of what it means to have a project "in place" if construction spans multiple calendar years so long as there is a robust tracking system in place and a contingency plan should mitigation projects be unsuccessful.	Comment noted.
GCD-16	In estimating potential emissions reductions from the Truck Replacement Program, drayage trucks should be modeled in MOVES2014a as short-haul trucks rather than combination long-haul.	Transco provided a revised AQMP on November 2, 2018. This revision included revised modeling for drayage trucks under the Truck Replacement Program using short-haul trucks. The final General Conformity Determination has been revised accordingly.
GCD-17	The draft General Conformity Determination states that the EPA is reviewing a request by the NYSDEC to reclassify the nonattainment area to "severe" ozone nonattainment. This should be "serious" ozone nonattainment.	Section 4.0 of the final General Conformity Determination has been revised to include this change.
GCD-18	When will the USACE make its final determination on the pipeline burial depth?	On October 12, 2018, Transco filed correspondence with the USACE stating the Transco had agreed to bury the Raritan Bay Loop with 15 feet of cover beneath federally maintained shipping channels and 7 feet of cover beneath anchorage area 28, as well as 4 feet of cover (or equivalent in consolidated rock or concrete mattresses) at the two crossings of the Neptune Cable. Transco filed a revised Air Quality Technical Report (AQTR) on November 2, 2018 that reflected the final burial depths and four remaining construction emission scenarios. The final General Conformity Determination has been revised accordingly. The final General Conformity Determination also explains that Transco is required to mitigate/offset fully whichever scenario is ultimately used.
GCD-19	The placement of dredge material will impact emissions. When will the USACE make a determination on the placement of dredge material?	At this time, the USACE has not made a final determination on whether Transco would receive approval to dispose of dredge material within the HARS. FERC has no jurisdictional authority to dictate when the USACE will make a determination. As such, the final General Conformity Determination includes estimates of emissions in consideration of each scenario with or without use of the HARS. We also recommend the inclusion of a certificate

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
		condition requiring emissions tracking during construction to reflect the ultimate actual circumstances authorized. The four construction emission scenarios presented in the final General Conformity Determination consider the uncertainty regarding use of the HARS.
GCD-20	The NJDEP concurs with the recommendation to provide monthly construction emissions tracking of PM _{2.5} , VOC, and NO _x to the EPA, NYSDEC, and NJDEP.	Comment noted.
GCD-21	New Jersey submitted its Final 8-Hour Ozone Attainment Demonstration (dated December 22, 2017) to the EPA on January 2, 2018.	Section 4.0 of the final General Conformity Determination has been revised to include this change.
GCD-22	Tier 1 direct mitigation projects should be prioritized and implemented in the New York-Northern New Jersey-Connecticut nonattainment area. Given the scope of the Project, Transco should include contingency measures in its mitigation plan to address unforeseen circumstances. A separate project included an additional 10 percent onto the estimated emissions and planned mitigation to cover potential shortfalls.	<p>Section 4.1.3 of the final General Conformity Determination has been revised to note this preference, but also explains that there are insufficient viable Tier 1 Mitigation projects to cover all emissions that would need to be mitigated under General Conformity. The final General Conformity Determination explains that Transco would need to also obtain some ERCs/CERs. As detailed in appendix A of the final General Conformity Determination, the proposed mitigation projects would occur within the NJ-NY-CT Interstate AQCR.</p> <p>We also disagree with including an additional 10 percent of emissions for contingency purposes. Instead, Transco would be required to track and report actual construction emissions, which would be filed with FERC, EPA, NYSDEC, and NJDEP. The General Conformity regulations include provisions to reevaluate conformity should unforeseen circumstances result in actual emissions exceeding estimated emissions by an applicability threshold.</p>
GCD-23	The NJDEP prefers direct mitigation over the purchase of ERCs. On past projects, ERCs were used to address technical delays, schedule changes, and to prevent shutdowns. The implementation of direct mitigation projects would assist New Jersey in meeting the 2008 and 2015 ozone NAAQS.	Comment noted. Section 4.1.3 of the final General Conformity Determination has been revised to note this preference. See also responses to comments GCD-1, GCD-9, GCD-17, and GCD-22.
GCD-24	Four scenarios were presented in the draft General Conformity Determination. Outstanding information from the USACE pertaining to pipeline burial depth and dredge material deposition remain unknown and affect multiple permits for the Project. Due to the uncertainty and multiple scenarios (of which only one is listed as the proposed Project), indicate whether Transco would conform	See the response to comments GCD-18 and GCD-19. The final General Conformity Determination considers four construction scenarios that vary based primarily on dredge disposal location and use of side-casting, and discloses the emissions associated with all four scenarios. Sections 4.1.2, 4.1.2.2, and 4.1.3 of the final General Conformity Determination have been revised to demonstrate that conformance would be achieved under even the worst-case, greatest emitting, scenario and clarifies that Transco

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	for all emissions scenarios so that there is no net increase in air emissions.	would directly mitigate and/or offset whichever scenario is ultimately used based on permitting.
GCD-25	Revise the (August 2018) AQTR to include all emissions scenarios presented in the final General Conformity Determination.	At our request, Transco filed a revised AQTR on November 2, 2018 that details the construction emissions for four scenarios that vary based primarily on dredge disposal location, which are also presented in section 3.1 of the final General Conformity Determination.
GCD-26	NJDEP requests that the final General Conformity Determination indicate that the approval of an alternate timeline is at the discretion of the states in accordance with 40 CFR 93.163(b), and that the state is not relieved of any obligation to meet any SIP or Clean Air Act milestone. NJDEP notes it has been in discussions with FERC, Transco, NYDEC, and EPA about use of alternative timeline.	Comment noted. The final General Conformity Determination clarifies that the use of an alternative timeline would require state approval. However, the determination also explains that based on early discussions of this option, states were reluctant to give approval to use an alternative timeline. Because no such approval has been given to date, the use of an alternate timeline is no longer under consideration. Transco has provided emission estimates and Tier 1 and Tier 2 mitigation/offsets within the same calendar year as the subject NESE Project emissions.
GCD-27	Marine material transport should be tracked as a construction activity in the Construction Emissions Tracking Plan and related tables.	The emissions associated with moving the pipe from the receiving terminal to Project-related facilities were included in the construction air emission estimates.
GCD-28	A 4.3 gram/horsepower-hour (g/hp-hr) emission factor was used to determine emissions for the clamshell dredge and assumes a tier 3 engine would be used. How would Transco ensure that a Tier 3 engine would be used/would Transco include a contractual requirement to use a Tier 3 engine? If a lower tier engine would be used, revise the emissions emission factor and estimates to reflect a lower tier.	Transco estimates that it would use clamshell dredges that meet Tier 3 standards if available and has reflected the use of such vessels in its emissions calculations. It is reasonable to assume that Tier 3 vessels would be available during construction as Tier 3 standards became effective for engines from model year 2008 and later. However, section 3.1 of the final General Conformity Determination recommends that Transco track the vehicle/offshore vessel tier in its Construction Emissions Tracking Plan and monthly emissions reports that it files with FERC, EPA, NYSDEC, and NJDEP. Construction emissions would be tracked and reported. Transco has demonstrated that between direct mitigation projects and ERCs/ CERs, there are more than enough mitigation/offsets to cover the full amount of estimated NO _x emissions. Finally, the General Conformity regulations include provisions to reevaluate conformity should unforeseen circumstances result in actual emissions exceeding estimated emissions by an applicability threshold.
GCD-29	Table 9 of the AQTR lists the W571 clamshell barge emission factor as 5.1 grams per horsepower-hour (g/hp-hr), but it appears that 4.3 g/hp-hr was used in appendix C. Please clarify which emission factor is accurate and revise the emissions estimates, if	In its November 29, 2018 filing, Transco indicated that its use of the 5.1 g/hp-hr emission factor was appropriately used in table 9 and appendix C of the AQTR. We have reviewed the AQTR and agree. Transco also states that the Linda Miller tugboat has a Tier 3 engine

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
	necessary. Transco specifically names the Linda Miller Tugboat with a Tier 3 engine rating for use during construction. Please verify that this tugboat has a Tier 3 rating and, if does not, revise the AQTR to reflect the correct tier rating.	rating and, should the Linda Miller not be available during construction, another tugboat with a Tier 3 engine rating would be used in its place. No changes to the AQTR are necessary.
GCD-30	Clarify if the air emissions associated with shipping the pipe joints by sea from the pipe manufacturer that are within the nonattainment area have been included in the air emissions estimates in appendix C. If not, revise appendix C.	See response to comment GCD-27.
GCD-31	Table 2 in appendix B (August 2018 AQTR) does not appear to include the volume of dredged material that is assumed to go to the HARS, pipeline depth of cover or the volumes.	See responses to comments GCD-18, GCD-19, GCD-24, and GCD-25. The revised AQTR filed on November 2, 2018 includes scenarios that all comply with the USACE required burial depth in federal channels and anchorage areas. The dredge material volumes assumed to go to the HARS and/or onshore for upland processing are included in table 2.
GCD-32	Comments related to emissions data from offshore construction equipment presented in appendix C, including the Seven Antares. Specifically, the comment questions whether the high hours of operation and number of generators, and horsepower rating for the vessel accurate.	In its November 29, 2018 filing, Transco indicates that the Seven Antares was presented as representative equipment that would be used during construction of the Project. The Seven Antares has five main generators and an additional generator that would be used during pipelay operations. However, Transco indicates that only three of the main engines would be utilized, with the remaining two on standby. In appendix C, the hours of operation accounts for the three main generators that would be used during pipelay.
GCD-33	Scenarios 2 and 4 (August 2018 AQTR) list Soil Transport as a construction phase, which is described as post processing trucking to upland site on the Quayside Disposal Processing Related Equipment Sheet. Please revise the Quayside Disposal Processing Related Equipment Sheet and any other related tables to reflect the additional air emissions generated by transporting soil to the upland facility.	In its November 29, 2018 filing, Transco indicates that potential air emissions generated by transporting soil to the upland facility are included in the Raritan Bay Loop Vehicle Emission tables in appendix C under the category "Soil Transport," rather than the Quayside Disposal Processing Equipment Emissions calculation tables.
GCD-34	NJDEP reiterates its previous comments (comment nos. 6 and 7 within its filing and GCD-22 and GCD-23 within our responses).	See responses to comments GCD-22 and GCD-23.
GCD-35	Transco is still in discussion with the USACE to determine the burial depth of the pipeline and whether the dredged materials can be placed in the HARS, and as a result, present four scenarios based on these uncertainties. List all potential NO _x emissions from each scenario in the AQMP (August 2018).	See responses to comments GCD-18, GCD-19, GCD-24, and GCD-25.
GCD-36	NJDEP reiterates its previous comments (comment nos. 6 and 7 within its filing and GCD-22 and GCD-23 within our responses).	See responses to comments GCD-22 and GCD-23.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
GCD-37	The model year criteria for eligible trucks in the AQMP (August 2018) should be 2006 and older to encourage the replacement of the oldest vehicles.	Comment noted. The Truck Replacement Program mitigation project, as designed, would allow Transco to meet its obligations under General Conformity. Transco's eligibility requirements of model year 1996 to 2006 meet's NJDEP's request of model year 2006 or older. We also note that trucks older than 1996 may be reaching their viable end use lifespan and may need to be replaced in the near future anyway. EPA urges that mitigation credits should not be allowed for vehicles that have already, or are close to, reaching their useful lifespan and would be replaced anyway, thus ensuring mitigation projects are resulting in additional reductions from those that might occur within the next 2 years regardless of the NESE project. We also note that Transco has already executed an MOA with New Jersey Motor Trucking Association for this project establishing an eligibility criteria of model year 1996 to 2006. We do not recommend any changes that would negatively affect the viability or timing of this direct mitigation project.
GCD-38	The same criteria used in conjunction with the NJ Motor Trucking Association Truck Replacement Program should be used for replacing additional trucks from other independent trucking companies. Specifically, as indicated, eligible trucks must be of model year 2006 and older and replaced with drayage trucks model year 2011 or newer.	Comment noted. See response to comment GCD-37.
GCD-39	In the AQMP (August 2018), please replace "combustion" trucks with "diesel" trucks.	Appendix A of the final General Conformity Determination has been revised accordingly.
GCD-40	Is there sufficient lead time for the proposed mitigation projects, some of which are anticipated to start in 2019 and continue through 2020?	Table 4.1-2 in the final General Conformity Determination specifically identifies offsets that Transco determined, in consultation with the mitigation project sponsors, would be generated in 2019 and 2020. In accordance with its Mitigation Project Emissions Tracking Plan, Transco would track emissions reductions from its proposed mitigation projects and file the results with FERC monthly. As stated in section 4.1.3, we also recommend that the Commission include a condition to any authorization for the NESE Project that Transco provide this data directly to the EPA, NYSDEC, and NJDEP on a monthly basis. Finally, Transco has demonstrated that there are sufficient Tier 2 ERCs/CERs to fully offset the Project as a contingency.
GCD-41	The NJ TRANSIT is proposing to replace a portion of their existing bus fleet with new electrified buses. Is the electric bus charging infrastructure part of the proposal?	The stated description of the project, as sponsored by Transco, includes the purchase of new electric buses. Additional details would be available as the project is further refined.

TABLE M-2 (cont'd)

Comments on the Draft EIS and Draft General Conformity Determination and Responses		
Comment Code	Comment Summary	Response
GCD-42	The Port Authority of New York and New Jersey is proposing to install a capture control system that will serve as a marine exhaust treatment system for the Port Newark. This project may be funded by another source and may not be available as a mitigation project.	This project is no longer under consideration and was not included in the revised AQTR filed November 2, 2018.
GCD-43	The AQMP (August 2018) states that the "PANYNJ is proposing to mitigate emissions contributions of Ground Support Equipment at NYC-area airports [...]" Have partners been identified for this strategy?	This project is no longer under consideration and was not included in the revised AQTR filed November 2, 2018.
GCD-44	The AQMP (August 2018) states that the "PANYNJ is proposing to replace a portion of their existing Cargo Handling Equipment (CHE) with new electrified CHEs. Please identify the owners of the CHEs that would be replaced.	This project is no longer under consideration and was not included in the revised AQTR filed November 2, 2018.
GCD-45	Please indicate in the Construction Emission Tracking Plan that other air emissions scenarios have been prepared for this project based upon the uncertainty surrounding USACE's determination concerning burial depth of the pipeline and whether use of the HARS is approved. In addition, please add marine material transport as an activity for Table 1 tracking in the Construction Emission Tracking Plan.	See responses to comments GCD-18, GCD-19, GCD-24, and GCD-25. The final General Conformity Determination recommends that the Commission include a condition to any authorization for the NESE Project that Transco file final versions of its plans prior to construction and once construction methods and other outstanding decision/approvals have been finalized. Also, the final General Conformity Determination includes a recommendation that the construction emission tracking table be revised to include marine material transport.
GCD-46	NJDEP reiterates its previous comment (comment no. 4 within its filing and GCD-20 within our responses).	See response to comment GCD-20.
GCD-47	In the Construction Emission Tracking Plan, the Quayside Disposal Processing Equipment – Upland Inputs table on the Raritan Bay Loop Equipment Operation Information Sheet includes construction phases for tracking air emissions. Revise the table to include a Soil Transport Construction Phase.	Transco's Construction Emissions Tracking Plan currently includes tracking of upland travel, which includes soil transport.
GCD-48	The monthly tracking of air emissions and the mitigation measures will ensure that the air emissions for the project are being mitigated, this will minimize the likelihood of a shortfall at the end of the project.	Comment noted.
GCD-49	NJDEP reiterates its previous comments (comment no. 30 within its filing and GCD-45 within our responses).	See response to comment GCD-45.
GCD-50	Please provide a copy of the monthly Mitigation Project Emissions Tracking Plan to the NJDEP to address potential issues on this Project.	The final General Conformity Determination has been revised to recommend that the monthly mitigation project emissions tracking

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Comments on the Draft EIS and Draft General Conformity Determination and Responses

Comment Code	Comment Summary	Response
GCD-51	Offshore pile driving emissions for installation (72 hours) and removal (46 hours) of 163 piles should clearly be accounted for in Transco's estimated construction emissions. All equipment used during construction should be listed. The listing should identify the vibratory and diesel impact hammers planned for installation and removal of 163 piles, lasting 116 to 118 hours in total, as part of construction of the Raritan Bay Loop.	<p>report is submitted to the EPA, NYSDEC, and NJDEP on a monthly basis.</p> <p>Section 3.1 of the final General Conformity Determination has been revised to include a recommendation that the Commission include in any authorization for the Project a condition that Transco file a final Air Quality Technical Report and Construction Emissions Tracking Plan that includes emissions associated with the vibratory/diesel pile driving hammers and any other emission sources that may ultimately be used onsite during construction that are not currently anticipated. The final General Conformity Determination also explains that Transco is required to mitigate/offset fully the final Project emissions.</p>

APPENDIX N

SUBJECT INDEX

Appendix N

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