20160519-5120 FERC PDF (Unofficial) 5/19/2016 12:09:26 PM

PennEast Pipeline Company, LLC
One Meridian Boulevard, Suite 2C01
Wyomissing, PA 19610

May 19, 2016

Ms. Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Re: PennEast Pipeline Company, LLC, Docket No. CP15-558-000
Errata for Electronic Alignment Sheet File Provided in Responses to April 29, 2016 Environmental Information Request
OEP/DG2E/Gas 2

Dear Ms. Bose:

On May 16, 2016, PennEast Pipeline Company, LLC (PennEast) submitted its responses to the Federal Energy Regulatory Commission's (Commission) April 29, 2016 Environmental Information Request in the above referenced docket. PennEast has since determined that the electronic file for Attachment G-4 containing Alignment Sheets 101-110 did not contain Alignment Sheet 106, but instead provided a duplicate Alignment Sheet 108. Additionally, Alignment Sheet 110 was not in numerical order. PennEast hereby provides the corrected electronic file for Attachment G-4 containing Alignment Sheets 101-110.

Pursuant to Section 385.2010 of the Commission's regulations, 18 C.F.R. § 385.2010 (2015), PennEast is contemporaneously serving copies of this letter to persons whose names appear on the Official Service List in this proceeding. Due to the size of the attachment, PennEast is not serving the attachment to the persons on the Official Service List. PennEast will provide the attachment to those persons upon request.

Should you have any questions concerning this filing, please contact me at (610) 406-4322.

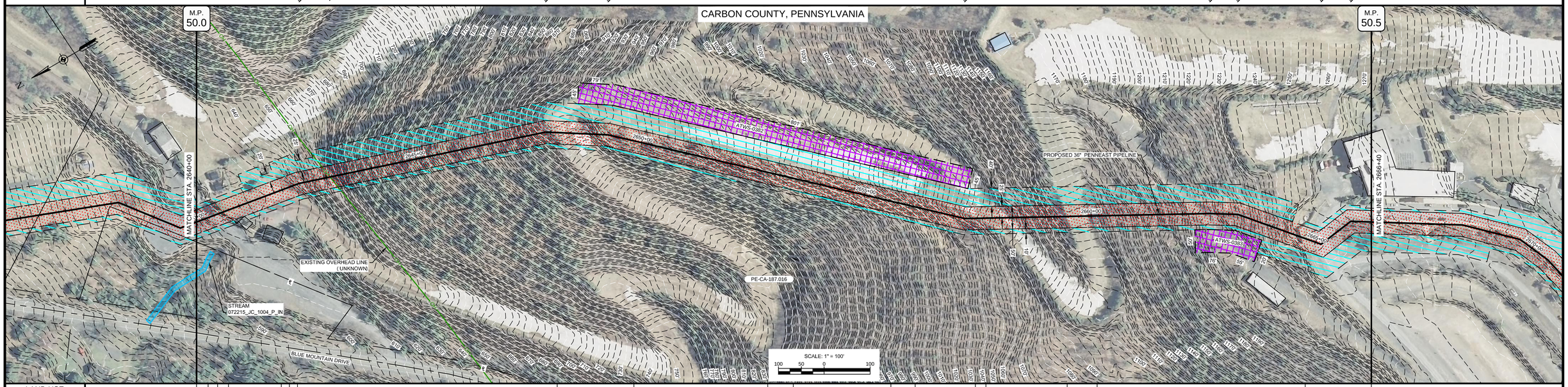
Sincerely,

/s/ Anthony C. Cox
Anthony C. Cox
PennEast Pipeline Company, LLC,
By its Project Manager
UGI Energy Services, LLC

cc: Medha Kochhar (FERC)
All Parties of Record (without attachment)

20160519-5120 FERC PDF (Unofficial) 5/19/2016 12:09:26 PM

OWNERSHIP / FOOTAGE	PE-CA-187.016 — 2640' (2640+00 to 2666+40)
STATIONING	2642+39 P.I. - 8°49'41" RT; 2643+08 OVERHEAD WIRE; 2647+09 P.I. - 14°15'09" RT; 2649+25 P.I. - 10°45'00" RT; 2657+24 P.I. - 14°22'08" LT; 2659+59 P.I. - 5°04'16" RT; 2660+20 P.I. - 17°49'47" RT; 2664+13 P.I. - 57°26'25" LT; 2665+05 P.I. - 38°32'10" RT



LAND USE	UF (2640+00 to 2642+39) · CI (2642+39 to 2642+43) · UF (2642+43 to 2642+58) · CI (2642+58 to 2643+08) · UF (2643+08 to 2643+23) · CI (2643+23 to 2643+28) · UF (2643+28 to 2647+09) · CI (2647+09 to 2648+25) · UF (2648+25 to 2652+63) · CI (2652+63 to 2653+20) · UF (2653+20 to 2657+24) · CI (2657+24 to 2658+04) · UF (2658+04 to 2659+59) · CI (2659+59 to 2660+20) · UF (2660+20 to 2664+13) · CI (2664+13 to 2665+05) · UF (2665+05 to 2666+40)
MATERIAL & COATING	19 (2653+20) · 21 (2664+13) · 19 (2665+05)
	2640' ③
SOILS	McD · KvF · DeF · DeD
ENVIRONMENTAL SITE SPECIFIC E&S	
CLASS LOCATION	CLASS III
DESIGN FACTOR	0.5
MAOP	1480 PSIG

PROFILE

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

TEMPORARY WATERBARS (T)

PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE

PERMANENT TRENCH PLUG ▲

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
>30	50

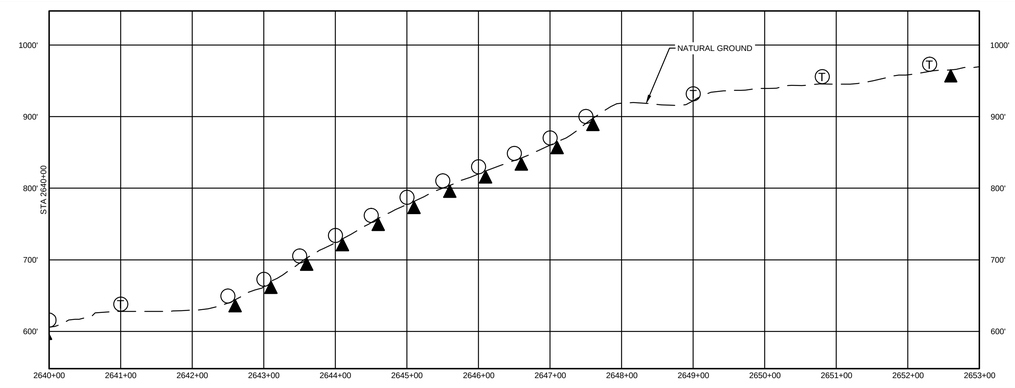
TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
>15 - 25	300
>25 - 35	200
>35 - 100	100
100	50

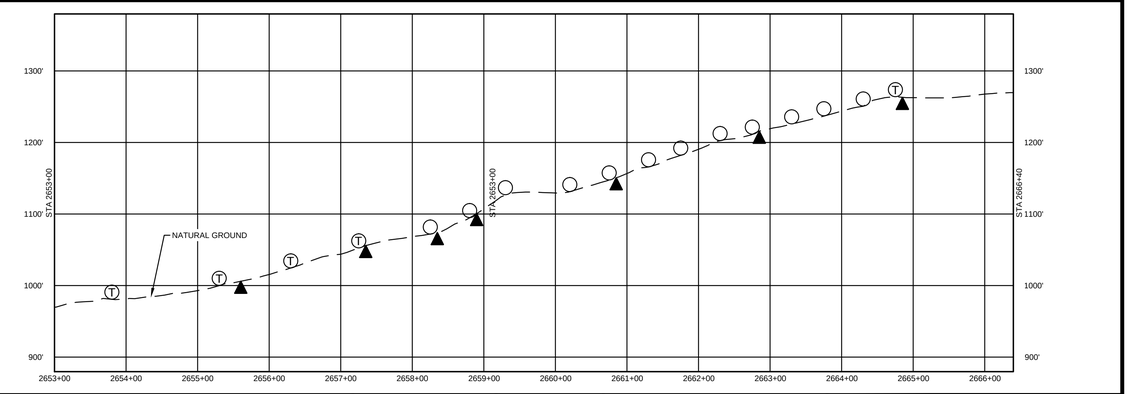
TRENCH PLUGS ARE REQUIRED AT ALL WATERBODY AND WETLAND CROSSINGS REGARDLESS OF SLOPE.*

SEE FIGURES 15 THRU 21 FOR SPECIFICATIONS.

IN AG FIELDS AND RESIDENTIAL AREAS WHERE WATERBARS ARE NOT TYPICALLY REQUIRED, INSTALL PERMANENT TRENCH PLUGS AT THE SAME SPACING AS IF PERMANENT WATERBARS WERE REQUIRED. (FERC PLAN)

GENERAL NOTES:
1. THE BEST MANAGEMENT PRACTICE (BMP) NUMBERS NOTED ABOVE CORRESPOND TO SPECIFIC DETAILS FOUND ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE BMP DETAILS INCLUDE GENERAL LAYOUT, LOCATION, DIMENSION, CONSTRUCTION, NOTES, MATERIALS, ETC. THAT SHALL BE FOLLOWED DURING CONSTRUCTION OF THE PIPELINE.
2. THE APPROX. LOCATION AND TYPE OF SEDIMENT BARRIERS TO BE INSTALLED ALONG THE CONSTRUCTION WORK AREA ARE LOCATED IN TABLES ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS.
3. CONTRACTOR SHALL INSTALL ONLY APPROVED PADEP/NJDEP DETAILS.





SOILS	LAND USE		MATERIAL			REFERENCE DRAWINGS	
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002	1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)	TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE
	2. COMMERCIAL / INDUSTRIAL (CI)		3	2640'	PIPE, 36.000" OD X .781" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, IN", FBE & EXT. FBE COATED	000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
	3. UPLAND FOREST (UF)		19	2	ELBOW, SEGMENTABLE, 45°, 36.000" OD X .781" WT, X-70, INT. FBE & EXT. FSC COATED	000-03-09-001 --- 008	TYPICAL E&S DETAILS
	4. INSTITUTIONAL (IN)		21	1	ELBOW, SEGMENTABLE, 90°, 36.000" OD X .781" WT, X-70, INT. FBE & EXT. FSC COATED	000-03-02-038 --- 39	RESIDENTIAL SITE SPECIFIC
	5. URBAN (UR)						
	6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)						
	7. RESIDENTIAL (RE)						
	8. ROADWAYS / RAILROADS (RD)						
	9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)						

REVISIONS					
NO.	REVISIONS	DATE	DRAWN	CK	APPR
A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS
B	PRELIMINARY ISSUE	12/17/2014	QPS	QPS	QPS
C	FERC DRAFT FILING	4/13/2015	QPS	QPS	QPS
D	FERC FINAL FILING	9/23/2015	HMM	HMM	HMM
E	ISSUED FOR BID	10/23/2015	HMM	HMM	HMM
F	SUPPLEMENTAL FERC FILING	3/18/2016	HMM	HMM	HMM
G	FERC DATA REQUEST	5/16/2016	HMM	HMM	HMM

APPROVALS		
	DRAWN BY	DATE
	HMM	9/23/2015
	CHECKED BY	DATE
	HMM	9/23/2015
	ENG. APPROVAL	DATE
	P.M. APPROVAL	DATE

SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL

DATE

PREPARED FOR PennEast PIPELINE

PREPARED BY Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
CARBON COUNTY, PENNSYLVANIA
STA. 2640+00 TO STA. 2666+40

SCALE	DRAWING NO.	REVISION
1" = 100'	000-03-01-101	G

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OWNERSHIP / FOOTAGE	2666+40	PE-CA-187.016	2681+43	PE-CA-187.018	2684+21	PE-CA-187.019	2686+57	PE-CA-187.020	2688+93	PE-CA-187.021	2691+36	PE-CA-187.022	2692+80
		1503'		278'		236'		236'		243'		144'	

STATIONING

- 2668+39 P.I. ~ 12°29'07" RT.
- 2669+69 P.I. ~ 21°59'25" RT.
- 2670+43 P.I. ~ 10°18'00" RT.
- 2678+51 P.I. ~ 1°34'31" LT.
- 2681+43 PROPERTY LINE
- 2683+85 P.I. ~ 1°20'27" RT.
- 2684+21 PROPERTY LINE
- 2686+57 PROPERTY LINE
- 2688+15 CENTERLINE OF BETHLEHEM WATER AUTHORITY TUNNEL
- 2688+93 PROPERTY LINE
- 2691+36 PROPERTY LINE

LAND USE	CI	RD	UF	RD	UF	RD	UF	RD	UF	RD	UF	RD	UF	RD	UF

MATERIAL & COATING: (19) 2669+69; (3) 2640'

SOILS	DeD
ENVIRONMENTAL SITE SPECIFIC E&S	
CLASS LOCATION	CLASS III
DESIGN FACTOR	0.5
MAOP	1480 PSIG

PROFILE

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- TEMPORARY WATERBARS (T)
- PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE ○
- PERMANENT TRENCH PLUG ▲

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
>30	50

TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
>15 - 25	300
>25 - 35	200
>35 - 100	100
100	50

TRENCH PLUGS ARE REQUIRED AT ALL WATERBODY AND WETLAND CROSSINGS REGARDLESS OF SLOPE.[1]

SEE FIGURES 16 THRU 21 FOR SPECIFICATIONS.

IN AG FIELDS AND RESIDENTIAL AREAS WHERE WATERBARS ARE NOT TYPICALLY REQUIRED, INSTALL PERMANENT TRENCH PLUGS AT THE SAME SPACING AS IF PERMANENT WATERBARS WERE REQUIRED. (FERC PLAN)

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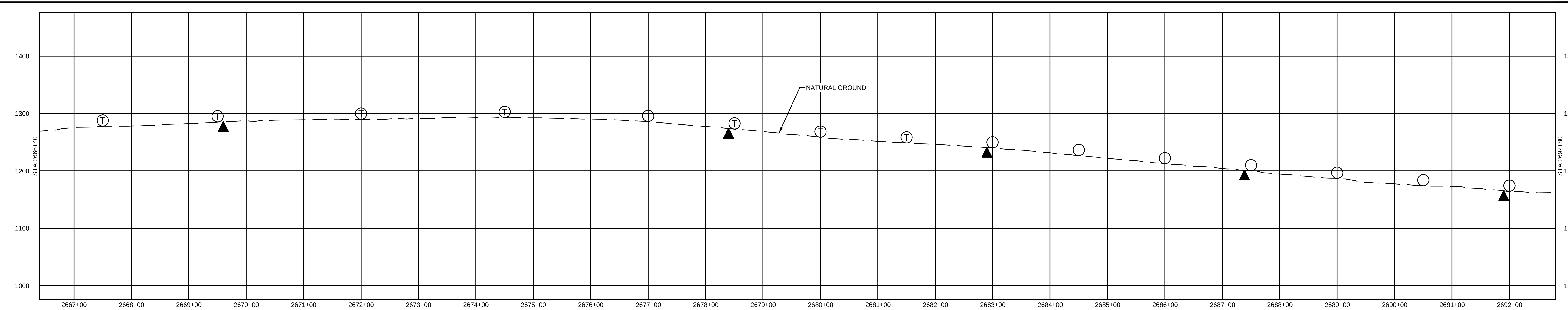

SOILS
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002

LAND USE	
1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)
2. COMMERCIAL / INDUSTRIAL (CI)	
3. UPLAND FOREST (UF)	
4. INSTITUTIONAL (IN)	
5. URBAN (UR)	
6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)	
7. RESIDENTIAL (RE)	
8. ROADWAYS / RAILROADS (RD)	
9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)	

MATERIAL		
TAG	QUANTITY	DESCRIPTION
3	2640'	PIPE, 36.000" OD X .761" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE COATED
19	1	ELBOW, SEGMENTABLE, 45°, 36.000" OD X .761" WT, X-70, INT. FBE & EXT. FBE COATED

REFERENCE DRAWINGS	
DWG. NO.	TITLE
000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
000-03-09-001 --- 008	TYPICAL E&S DETAILS
000-03-02-039	RESIDENTIAL SITE SPECIFIC
028-03-00-001	CIVIL SITE PLAN

REVISIONS					
NO.	REVISIONS	DATE	DRAWN	CK	APPR
A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS
B	PRELIMINARY ISSUE	12/17/2014	QPS	QPS	QPS
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F	SUPPLEMENTAL FERC FILING	3/18/2016	HMM	HMM	HMM
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APPROVALS	
DRAWN BY	DATE
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HMM	9/23/2015
ENG. APPROVAL	DATE
P.M. APPROVAL	DATE

SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL

DATE

PREPARED FOR: PennEast PIPELINE

PREPARED BY: Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
CARBON COUNTY, PENNSYLVANIA
STA. 2666+40 TO STA. 2692+80

SCALE	DRAWING NO.	REVISION
1" = 100'	000-03-01-102	G

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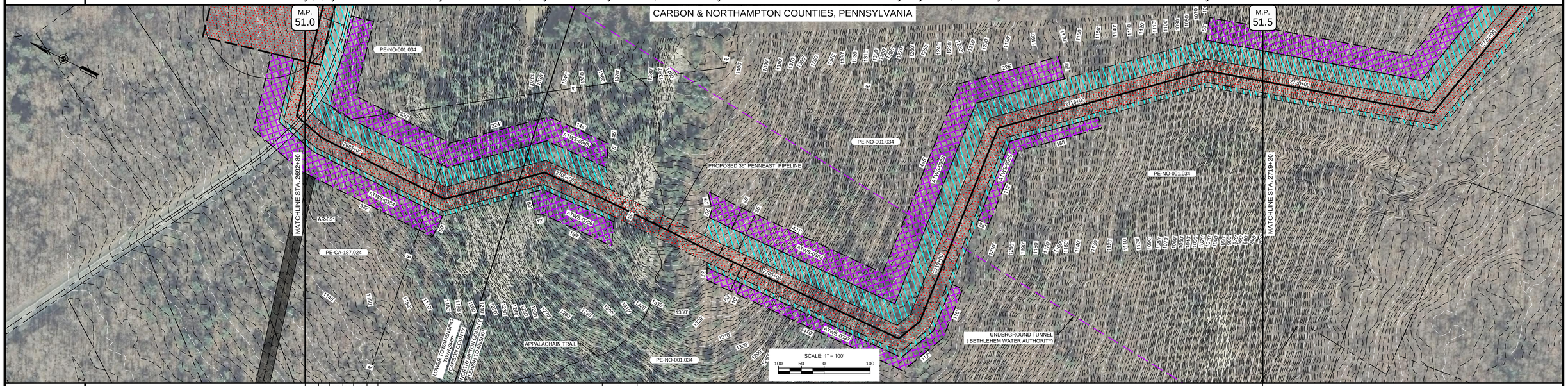
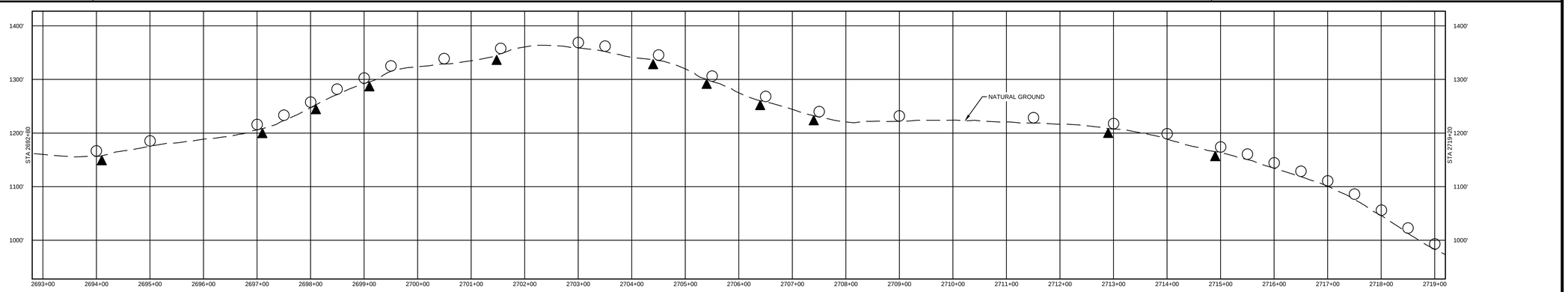
OWNERSHIP / FOOTAGE	PE-CA-187.022 82' · UNNAMED ROAD 16' · PE-CA-187.024 319' · PE-NO-001.034 2223'
STATIONING	2692+80 · 2693+62 · 2693+78 · 2696+97 · 2697+20 · 2699+00 CARBON & NORTHAMPTON COUNTIES · 2699+56 · 2701+09 · 2702+24 CENTERLINE OF APPALACHIAN TRAIL · 2703+76 · 2706+97 · 2708+09 · 2710+67 CENTERLINE OF BETHLEHEM WATER AUTHORITY TUNNEL · 2713+24 · 2717+06 · 2719+20
LAND USE	UF · RD · UF · RD · UF · RD · UF · OL · UF
MATERIAL & COATING	21 · 19 · 19 · 23 · 15 · 17 · 15 — 826' · 256' · 502' · 1056'
SOILS	DeD · DeF · HgF
ENVIRONMENTAL SITE SPECIFIC E&S	
CLASS LOCATION	CLASS III · CLASS I
DESIGN FACTOR	0.5 · 0.72
MAOP	1480 PSIG



PROFILE



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TEMPORARY WATERBARS (T)

PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE

PERMANENT TRENCH PLUG

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
>30	50

TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
>15 - 25	300
>25 - 35	200
>35 - 100	100
100	50

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3. CONTRACTOR SHALL INSTALL ONLY APPROVED PADEP/NJDEP DETAILS.

SOILS

FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002

LAND USE

1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)
2. COMMERCIAL / INDUSTRIAL (CI)	
3. UPLAND FOREST (UF)	
4. INSTITUTIONAL (IN)	
5. URBAN (UR)	
6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)	
7. RESIDENTIAL (RE)	
8. ROADWAYS / RAILROADS (RD)	
9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)	

MATERIAL

TAG	QUANTITY	DESCRIPTION
1	1056'	PIPE, 36.000" OD X .654" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, 3N", FBE & EXT. FBE & COATED
3	1328'	PIPE, 36.000" OD X .781" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, 3N", FBE & EXT. FBE COATED
5	256'	PIPE, 36.000" OD X .781" WT, API 5L PSL-2, X-70, DSAW, 3NT, FBE & EXT., FBE & ARO COATED
15	2	ELBOW, SEGMENTABLE, 45°, 36.000" OD X .654" WT., X-70, 3NT, FBE & EXT, FBE COATED
17	1	ELBOW, SEGMENTABLE, 90°, 36.000" OD X .654" WT., X-70, 3NT, FBE & EXT, FBE COATED
19	2	ELBOW, SEGMENTABLE, 45°, 36.000" OD X .781" WT., X-70, 3NT, FBE & EXT, FBE COATED
21	2	ELBOW, SEGMENTABLE, 90°, 36.000" OD X .781" WT., X-70, 3NT, FBE & EXT, FBE COATED

REFERENCE DRAWINGS

DWG. NO.	TITLE
000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
000-03-09-001 --- 008	TYPICAL E&S DETAILS
000-03-03-035	ACCESS ROAD DETAIL
028-03-00-001	CIVIL SITE PLAN
000-03-10-001	APPALACHIAN TRAIL DETAIL

REVISIONS

NO.	REVISIONS	DATE	DRAWN	CK	APPR
A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS
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F	SUPPLEMENTAL FERC FILING	3/18/2016	HMM	HMM	HMM
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APPROVALS

DRAWN BY	DATE
HMM	9/23/2015
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ENG. APPROVAL	DATE
P.M. APPROVAL	DATE

SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL

DATE

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PennEast PIPELINE

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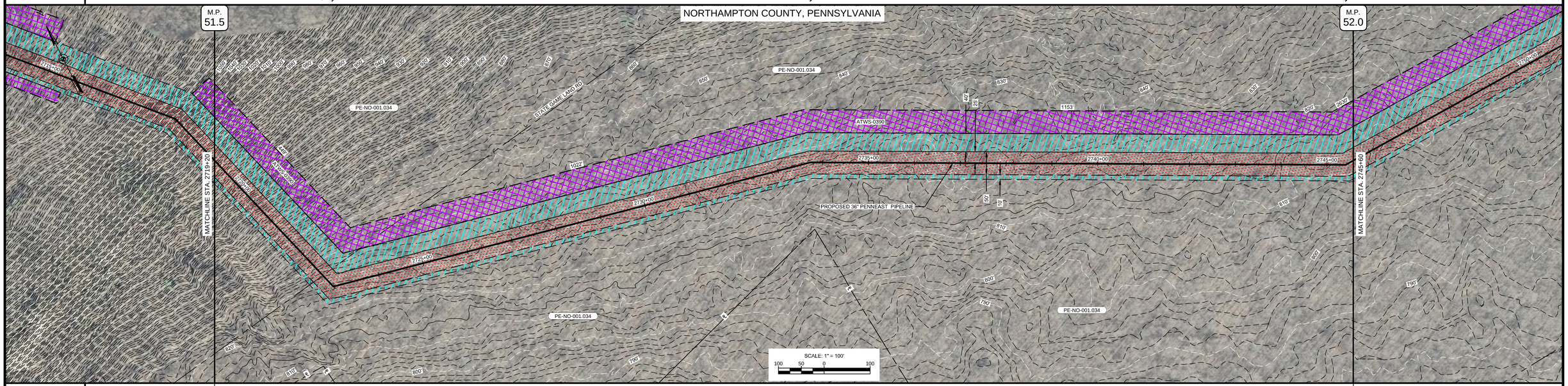
PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
CARBON & NORTHAMPTON COUNTIES, PENNSYLVANIA
STA. 2692+80 TO STA. 2719+20

SCALE	DRAWING NO.	REVISION
1" = 100'	000-03-01-103	G

OWNERSHIP / FOOTAGE		2719+20	PE-NO-001.034 2640'		2745+60	
STATIONING		2722+84 CENTERLINE OF STATE GAME LAND RD 2722+96 P.I. = 61°43'51" LT.	2733+73 P.I. = 14°45'19" RT.		2745+41 P.I. = 29°08'16" LT.	



LAND USE		UF				
20160519-5120 FERC PDF (Unofficial) 5/19/2016 12:09:26 PM MATERIAL & COATING		17 2722+84		2640' (1)		15 2745+41
SOILS		HgF	LcD	LbD	LcD	LbD
ENVIRONMENTAL SITE SPECIFIC E&S						
CLASS LOCATION		CLASS I				
DESIGN FACTOR		0.72				
MAOP		1480 PSIG				

PROFILE

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PERMANENT TRENCH PLUG ▲

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SLOPE (%)	SPACING (FT)
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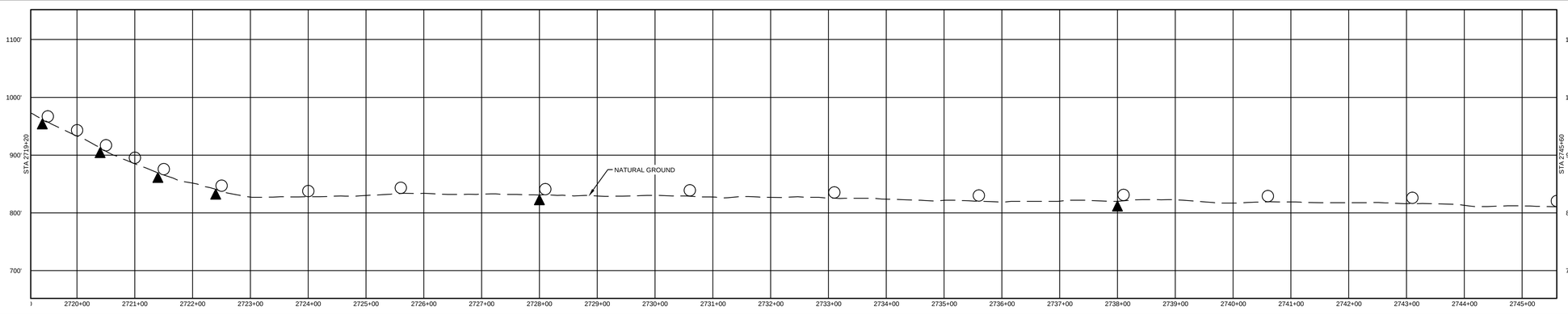


SOILS	LAND USE		MATERIAL			REFERENCE DRAWINGS		REVISIONS						APPROVALS	
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002	1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)	TAG	QUANTITY	DESCRIPTION	DWG. NO.	TITLE	NO.	REVISIONS	DATE	DRAWN	CK	APPR	DRAWN BY	DATE
	2. COMMERCIAL / INDUSTRIAL (CI)		1	2640'	RPE, 36.000" OD X .654" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, 3N", FBE & EXT. FBE & COATED	000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS	A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS	HMM	9/23/2015
	3. UPLAND FOREST (UF)		15	1	ELBOW, SEGMENTABLE, 45°, 36.000" OD X .654" WT., X-70, 3NT, FBE & EXT., FBE COATED	000-03-09-001 --- 008	TYPICAL E&S DETAILS	B	PRELIMINARY ISSUE	12/17/2014	QPS	QPS	QPS	CHECKED BY	DATE
	4. INSTITUTIONAL (IN)		17	1	ELBOW, SEGMENTABLE, 90°, 36.000" OD X .654" WT., X-70, 3NT, FBE & EXT. FBE COATED			C	FERC DRAFT FILING	4/13/2015	QPS	QPS	QPS	HMM	9/23/2015
	5. URBAN (UR)							D	FERC FINAL FILING	9/23/2015	HMM	HMM	HMM	ENG. APPROVAL	DATE
	6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)							E	ISSUED FOR BID	10/23/2015	HMM	HMM	HMM		
	7. RESIDENTIAL (RE)							F	SUPPLEMENTAL FERC FILING	3/18/2016	HMM	HMM	HMM	P.M. APPROVAL	DATE
	8. ROADWAYS / RAILROADS (RD)							G	FERC DATA REQUEST	5/16/2016	HMM	HMM	HMM		
	9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)														

SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL

DATE

PREPARED FOR

PennEast PIPELINE

PREPARED BY

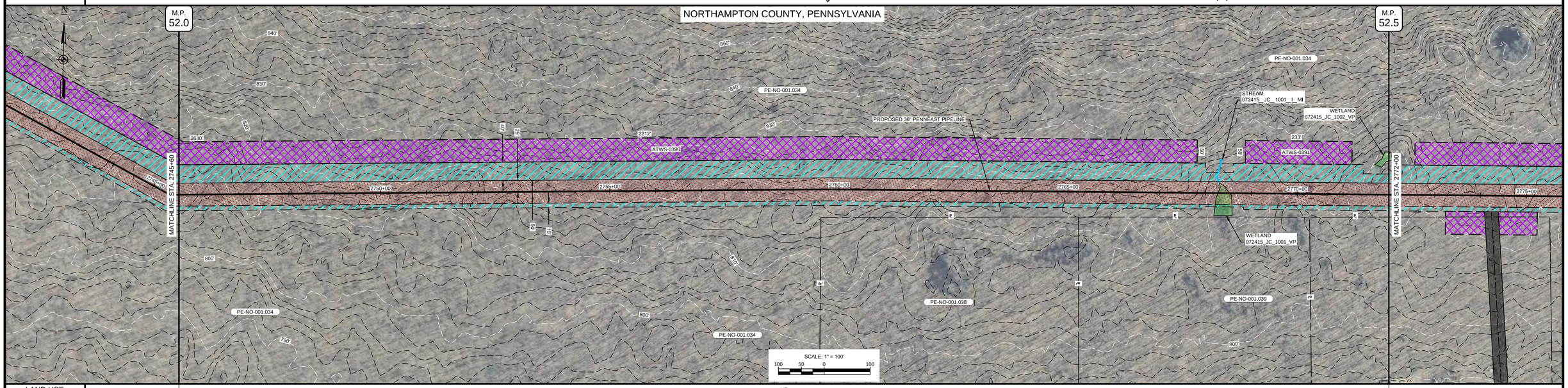
Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
NORTHAMPTON COUNTIES, PENNSYLVANIA
STA. 2719+20 TO STA. 2745+60

SCALE	DRAWING NO.	REVISION
1" = 100'	000-03-01-104	G

OWNERSHIP / FOOTAGE	2745+60	PE-NO-001.034 2640'	2772+00
STATIONING			



LAND USE		UF	
MATERIAL & COATING		2640' ①	
SOILS		LbD / LcD / LbD	
ENVIRONMENTAL SITE SPECIFIC E&S			
CLASS LOCATION		CLASS I	CLASS II
DESIGN FACTOR		0.72	0.6
MAOP		1480 PSIG	

20160519-5120 FERC PDF (Unofficial) 5/19/2016 12:09:26 PM

PROFILE

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

TEMPORARY WATERBARS Ⓣ

PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE ○

PERMANENT TRENCH PLUG ▲

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
>30	50

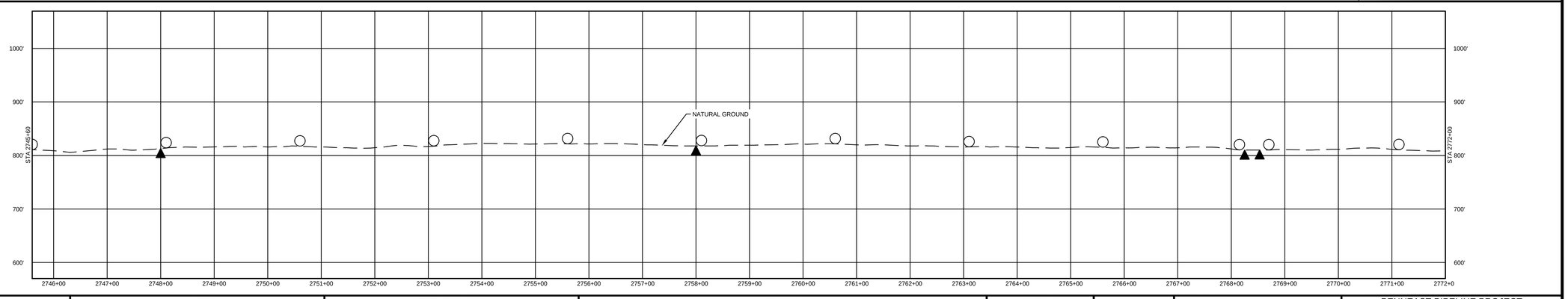
TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
>15 - 25	300
>25 - 35	200
>35 - 100	100
100	50

TRENCH PLUGS ARE REQUIRED AT ALL WATERBODY AND WETLAND CROSSINGS REGARDLESS OF SLOPE.*

SEE FIGURES 16 THRU 21 FOR SPECIFICATIONS.

IN AG FIELDS AND RESIDENTIAL AREAS WHERE WATERBARS ARE NOT TYPICALLY REQUIRED, INSTALL PERMANENT TRENCH PLUGS AT THE SAME SPACING AS IF PERMANENT WATERBARS WERE REQUIRED. (FERC PLAN)

GENERAL NOTES:
1. THE BEST MANAGEMENT PRACTICE (BMP) NUMBERS NOTED ABOVE CORRESPOND TO SPECIFIC DETAILS FOUND ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE BMP DETAILS INCLUDE GENERAL LAYOUT, LOCATION, DIMENSION, CONSTRUCTION, NOTES, MATERIALS, ETC. THAT SHALL BE FOLLOWED DURING CONSTRUCTION OF THE PIPELINE.
2. THE APPROX. LOCATION AND TYPE OF SEDIMENT BARRIERS TO BE INSTALLED ALONG THE CONSTRUCTION WORKSPACE ARE LOCATED IN TABLES ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS.
3. CONTRACTOR SHALL INSTALL ONLY APPROVED PADEP/NJDEP DETAILS.



SOILS	LAND USE				MATERIAL	
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002	1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)	TAG	QUANTITY	DESCRIPTION	
	2. COMMERCIAL / INDUSTRIAL (CI)		1	2640'	RPE, 36.000" OD X .656" WT., API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & COATED	
	3. UPLAND FOREST (UF)					
	4. INSTITUTIONAL (IN)					
	5. URBAN (UR)					
	6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)					
	7. RESIDENTIAL (RE)					
	8. ROADWAYS / RAILROADS (RD)					
	9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)					

REFERENCE DRAWINGS	
DWG. NO.	TITLE
000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
000-03-09-001 --- 008	TYPICAL E&S DETAILS

NO.	REVISIONS	DATE	DRAWN	CK	APPR
A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS
B	PRELIMINARY ISSUE	12/17/2014	QPS	QPS	QPS
C	FERC DRAFT FILING	4/13/2015	QPS	QPS	QPS
D	FERC FINAL FILING	9/23/2015	HMM	HMM	HMM
E	ISSUED FOR BID	10/23/2015	HMM	HMM	HMM
F	SUPPLEMENTAL FERC FILING	3/18/2016	HMM	HMM	HMM
G	FERC DATA REQUEST	5/16/2016	HMM	HMM	HMM

APPROVALS	
DRAWN BY	DATE
HMM	9/23/2015
CHECKED BY	DATE
HMM	9/23/2015
ENG. APPROVAL	DATE
P.M. APPROVAL	DATE

SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL

DATE

PREPARED FOR

PennEast PIPELINE

PREPARED BY

Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
NORTHAMPTON COUNTY, PENNSYLVANIA
STA. 2745+60 TO STA. 2772+00

SCALE	DRAWING NO.	REVISION
1" = 100'	000-03-01-105	G

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OWNERSHIP / FOOTAGE	2772+00	PE-NO-001.034 1388'	2785+88	PE-NO-001.041 823'	2794+11	PE-NO-A657.000 94'	2795+05	PE-NO-A659.000 198'	2797+03	PE-NO-A660.000 137'	2798+40

STATIONING

2778+48 ENTER/ EXIT WETLAND
2779+15 ENTER/ EXIT WETLAND
2785+88 PROPERTY LINE
2791+75 P.I. ~ 57°16'36" LT.
2794+11 PROPERTY LINE
2794+20 P.I. ~ 50°58'53" RT.
2795+05 PROPERTY LINE
2797+03 PROPERTY LINE

LAND USE	UF
MATERIAL & COATING	(17) 2791+75; (17) 2794+20; 2640' (1)
SOILS	LbD; LcD
ENVIRONMENTAL SITE SPECIFIC E&S	
CLASS LOCATION	CLASS II
DESIGN FACTOR	0.6
MAOP	1480 PSIG

PROFILE

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

TEMPORARY WATERBARS (T)
PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE ○
PERMANENT TRENCH PLUG ▲

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
>30	50

TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
>15 - 25	300
>25 - 35	200
>35 - 100	100
100	50

TRENCH PLUGS ARE REQUIRED AT ALL WATERBODY AND WETLAND CROSSINGS REGARDLESS OF SLOPE.¹

SEE FIGURES 16 THRU 21 FOR SPECIFICATIONS.

IN AG FIELDS AND RESIDENTIAL AREAS WHERE WATERBARS ARE NOT TYPICALLY REQUIRED, INSTALL PERMANENT TRENCH PLUGS AT THE SAME SPACING AS IF PERMANENT WATERBARS WERE REQUIRED. (FERC PLAN)

GENERAL NOTES:
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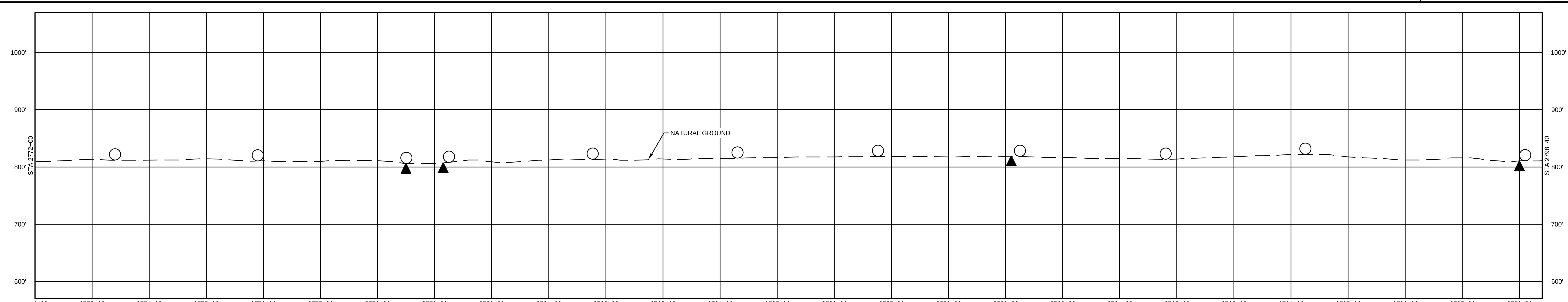

SOILS	LAND USE	
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002	1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)
	2. COMMERCIAL / INDUSTRIAL (CI)	
	3. UPLAND FOREST (UF)	
	4. INSTITUTIONAL (IN)	
	5. URBAN (UR)	
	6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)	
	7. RESIDENTIAL (RE)	
	8. ROADWAYS / RAILROADS (RD)	
	9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)	

MATERIAL

TAG	QUANTITY	DESCRIPTION
1	2640'	PIPE, 36.000" OD X .634" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & COATED
17	2	ELBOW, SEGMENTABLE, 90°, 36.000" OD X .634" WT, X-70, INT. FBE & EXT. FBE COATED

REFERENCE DRAWINGS

DWG. NO.	TITLE
000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
000-03-09-001 --- 008	TYPICAL E&S DETAILS
000-03-03-036	ACCESS ROAD DETAIL

REVISIONS

NO.	REVISIONS	DATE	DRAWN	CK	APPR
A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS
B	PRELIMINARY ISSUE	12/17/2014	QPS	QPS	QPS
C	FERC DRAFT FILING	4/13/2015	QPS	QPS	QPS
D	FERC FINAL FILING	9/23/2015	HMM	HMM	HMM
E	ISSUED FOR BID	10/23/2015	HMM	HMM	HMM
F	SUPPLEMENTAL FERC FILING	3/18/2016	HMM	HMM	HMM
G	FERC DATA REQUEST	5/16/2016	HMM	HMM	HMM

APPROVALS

DRAWN BY	DATE
HMM	9/23/2015
CHECKED BY	DATE
HMM	9/23/2015
ENG. APPROVAL	DATE
P.M. APPROVAL	DATE

SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL

DATE

PREPARED FOR: PennEast PIPELINE

PREPARED BY: Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
NORTHAMPTON COUNTY, PENNSYLVANIA
STA. 2772+00 TO STA. 2798+40

SCALE	DRAWING NO.	REVISION
1 = 100'	000-03-01-106	G

OWNERSHIP / FOOTAGE	2798+40	PE-NO-A660.000 67'	2799+07	PE-NO-A661.000 565'	2804+72	PE-NO-A662.000 99'	2805+71	PE-NO-001.002 923'	2814+94	PE-NO-A653.000 772'	2822+66	PE-NO-001.002 214'	2824+80

STATIONING

- 2799+07 PROPERTY LINE
- 2799+09 P.I. ~ 42°07'06" RT.
- 2803+52 P.I. ~ 34°51'06" LT.
- 2804+72 PROPERTY LINE
- 2805+68 P.I. ~ 52°16'08" RT.
- 2805+71 PROPERTY LINE
- 2810+72 P.I. ~ 18°38'43" LT.
- 2812+70 CENTERLINE OF STREAM
- 2814+94 PROPERTY LINE
- 2815+99 P.I. ~ 19°18'23" LT.
- 2817+11 CENTERLINE OF STREAM
- 2820+45 CENTERLINE OF STREAM
- 2822+66 PROPERTY LINE
- 2824+58 CENTERLINE OF STREAM

LAND USE	UF

MATERIAL & COATING

Station	Tag
2799+09	15
2803+52	15
2805+68	17
2810+72	15
2815+99	15

Segment	Length	Tag
to 2812+55	1415'	1
2812+55 – 2812+95	40'	2
2812+95 – 2816+97	402'	1
2816+97 – 2817+37	40'	2
2817+37 – 2820+31	294'	1
2820+31 – 2820+71	40'	2
2820+71 – 2824+43	372'	1
2824+43 – 2824+80	37'	2

SOILS	LcD	LbB	BvB	LbB	BvB	LbB	BvB	AoB

ENVIRONMENTAL SITE SPECIFIC E&S

CLASS LOCATION	CLASS II	CLASS I
DESIGN FACTOR	0.6	0.72
MAOP	1480 PSIG	

PROFILE

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

- TEMPORARY WATERBARS (T)
- PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE (○)
- PERMANENT TRENCH PLUG (▲)

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
>30	50

TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
>15 - 25	300
>25 - 35	200
>35 - 100	100
100	50

TRENCH PLUGS ARE REQUIRED AT ALL WATERBODY AND WETLAND CROSSINGS REGARDLESS OF SLOPE.[1]

SEE FIGURES 16 THRU 21 FOR SPECIFICATIONS.

IN AG FIELDS AND RESIDENTIAL AREAS WHERE WATERBARS ARE NOT TYPICALLY REQUIRED, INSTALL PERMANENT TRENCH PLUGS AT THE SAME SPACING AS IF PERMANENT WATERBARS WERE REQUIRED. (FERC PLAN)

GENERAL NOTES:
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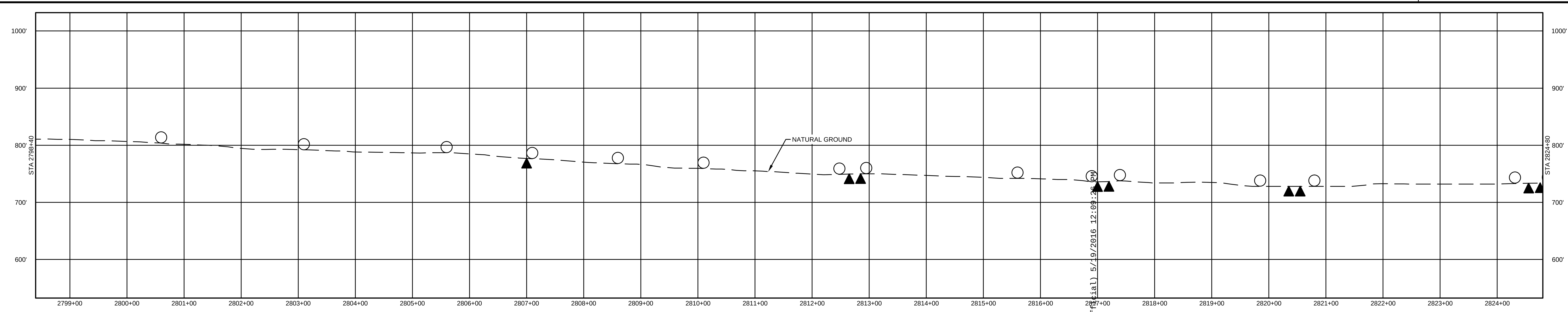

SOILS	LAND USE	
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002	1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)
	2. COMMERCIAL / INDUSTRIAL (CI)	
	3. UPLAND FOREST (UF)	
	4. INSTITUTIONAL (IN)	
	5. URBAN (UR)	
	6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)	
	7. RESIDENTIAL (RE)	
	8. ROADWAYS / RAILROADS (RD)	
	9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)	

MATERIAL

TAG	QUANTITY	DESCRIPTION
1	2483'	PIPE, 36.000" OD X .634" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & COATED
2	137'	PIPE, 36.000" OD X .634" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & 5.2" CC COATED
15	4	ELBOW, SEGMENTABLE, 45°, 36.000" OD X .634" WT, X-70, INT. FBE & EXT. FBE COATED
17	1	ELBOW, SEGMENTABLE, 90°, 36.000" OD X .634" WT, X-70, INT. FBE & EXT. FBE COATED

REFERENCE DRAWINGS

DWG. NO.	TITLE
000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
000-03-09-001 --- 008	TYPICAL E&S DETAILS

REVISIONS

NO.	REVISIONS	DATE	DRAWN	CK	APPR
A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS
B	PRELIMINARY ISSUE	12/17/2014	QPS	QPS	QPS
C	FERC DRAFT FILING	4/13/2015	QPS	QPS	QPS
D	FERC FINAL FILING	9/23/2015	HMM	HMM	HMM
E	ISSUED FOR BID	10/23/2015	HMM	HMM	HMM
F	SUPPLEMENTAL FERC FILING	3/18/2016	HMM	HMM	HMM
G	FERC DATA REQUEST	5/16/2016	HMM	HMM	HMM

APPROVALS

	DATE
DRAWN BY: HMM	9/23/2015
CHECKED BY: HMM	9/23/2015
ENG. APPROVAL	
P.M. APPROVAL	

SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL

DATE

PREPARED FOR: PennEast PIPELINE

PREPARED BY: Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
NORTHAMPTON COUNTY, PENNSYLVANIA
STA. 2798+40 TO STA. 2824+80

SCALE	DRAWING NO.	REVISION
1 = 100'	000-03-01-107	G

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OWNERSHIP / FOOTAGE	2824+80	PE-NO-001.002 301'	2827+81	PE-NO-001.004 2339'	2851+20

STATIONING

2825+65 ENTER/ EXIT WETLAND
2826+58 P.I. ~ 11°04'19" RT.
2826+70 ENTER/ EXIT WETLAND
2826+98 P.I. ~ 11°04'19" RT.
2827+38 P.I. ~ 11°04'19" RT.
2827+78 P.I. ~ 11°04'19" RT.
2827+81 PROPERTY LINE
2833+70 CENTERLINE OF RAILROAD

LAND USE		UF	AG	UF	AG	UF	AG	UF	AG	

MATERIAL & COATING

2824+83 — 3' (2) — 852' (1) — 2833+35 — 70' (5) — 2834+05 — 1715' (1)

SOILS		AoB	BvB	BuB	AnA	CpB	AfB	AfA	AfB	

ENVIRONMENTAL SITE SPECIFIC E&S

CLASS LOCATION		CLASS I	CLASS II		
DESIGN FACTOR		0.72	0.6	0.5	0.6
MAOP		1480 PSIG			

PROFILE

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

TEMPORARY WATERBARS (T)

PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE ○

PERMANENT TRENCH PLUG ▲

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
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TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
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TRENCH PLUGS ARE REQUIRED AT ALL WATERBODY AND WETLAND CROSSINGS REGARDLESS OF SLOPE.[1]

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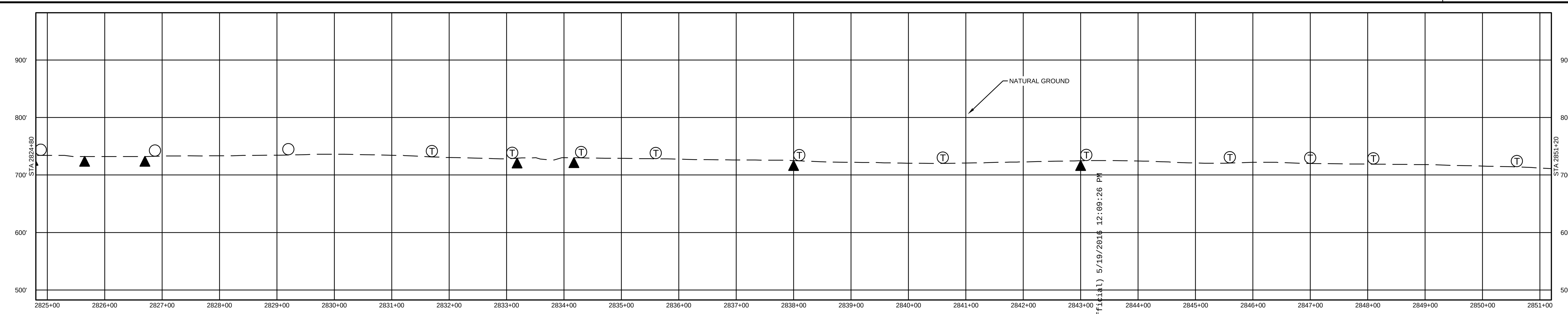

SOILS	LAND USE	
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002	1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)
	2. COMMERCIAL / INDUSTRIAL (CI)	
	3. UPLAND FOREST (UF)	
	4. INSTITUTIONAL (IN)	
	5. URBAN (UR)	
	6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)	
	7. RESIDENTIAL (RE)	
	8. ROADWAYS / RAILROADS (RD)	
	9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)	

MATERIAL

TAG	QUANTITY	DESCRIPTION
1	2567'	PIPE, 36.000" OD X .634" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & COATED
2	3'	PIPE, 36.000" OD X .634" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & 5.2" CC COATED
5	70'	PIPE, 36.000" OD X .761" WT, API 5L PSL-2, X-70, DSAW, INT. FBE & EXT. FBE & ARO COATED

REFERENCE DRAWINGS

DWG. NO.	TITLE
000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
000-03-09-001 --- 008	TYPICAL E&S DETAILS
000-03-03-037	ACCESS ROAD DETAIL

REVISIONS

NO.	REVISIONS	DATE	DRAWN	CK	APPR
A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS
B	PRELIMINARY ISSUE	12/17/2014	QPS	QPS	QPS
C	FERC DRAFT FILING	4/13/2015	QPS	QPS	QPS
D	FERC FINAL FILING	9/23/2015	HMM	HMM	HMM
E	ISSUED FOR BID	10/23/2015	HMM	HMM	HMM
F	SUPPLEMENTAL FERC FILING	3/18/2016	HMM	HMM	HMM
G	FERC DATA REQUEST	5/16/2016	HMM	HMM	HMM

APPROVALS

DRAWN BY	DATE
HMM	9/23/2015
CHECKED BY	DATE
HMM	9/23/2015
ENG. APPROVAL	DATE
P.M. APPROVAL	DATE

SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL

DATE

PREPARED FOR: PennEast PIPELINE

PREPARED BY: Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
NORTHAMPTON COUNTY, PENNSYLVANIA
STA. 2824+80 TO STA. 2851+20

SCALE	DRAWING NO.	REVISION
1 = 100'	000-03-01-108	G

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OWNERSHIP / FOOTAGE	2851+20	PE-NO-001.004 361'	2854+81	DELPS RD / T555 39'	2855+20	PE-NO-001.011 2240'	2877+60

STATIONING

2854+81 PROPERTY LINE
2854+88 EDGE OF ROAD
2855+00 CENTERLINE OF DELPS RD / T555
2855+07 EDGE OF ROAD
2855+20 PROPERTY LINE
2859+11 P.I. - 9°42'43" LT.
2859+51 P.I. - 9°42'43" LT.
2859+91 P.I. - 9°42'43" LT.
2866+88 ENTER/ EXIT WETLAND
2868+14 CENTERLINE OF STREAM
2868+73 ENTER/ EXIT WETLAND
2869+48 OVERHEAD WIRE
2872+73 EDGE OF DRIVEWAY
2872+90 EDGE OF DRIVEWAY

LAND USE		AG	UF	RD	UF	AG	UF	AG	UF	AG	UF	AG	UF	RD	AG

MATERIAL & COATING

351' (1)	2854+71	60' (5)	2855+31	1269' (1)	2868+00	40' (2)	2868+40	920' (1)

SOILS	AfB	CpA	AfB	CpA	BuB	AnA	AoB	AnA	CrB	WkD	BkC

ENVIRONMENTAL SITE SPECIFIC E&S

CLASS LOCATION	CLASS II		
DESIGN FACTOR	0.6	0.5	0.6
MAOP	1480 PSIG		

PROFILE

THE LOCATION OF TRENCH PLUGS AND WATERBARS ARE INTENDED TO BE USED AS A GUIDELINE ONLY. EXACT LOCATION TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CHIEF INSPECTOR.

TEMPORARY WATERBARS (T)
PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE (○)
PERMANENT TRENCH PLUG (▲)

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
>30	50

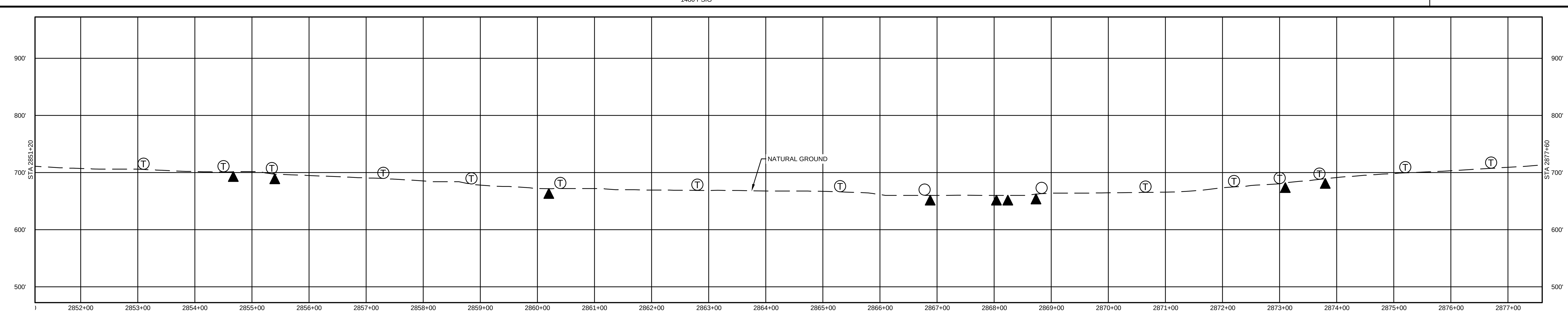
TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
>15 - 25	300
>25 - 35	200
>35 - 100	100
100	50

TRENCH PLUGS ARE REQUIRED AT ALL WATERBODY AND WETLAND CROSSINGS REGARDLESS OF SLOPE.[1]

SEE FIGURES 16 THRU 21 FOR SPECIFICATIONS.

IN AG FIELDS AND RESIDENTIAL AREAS WHERE WATERBARS ARE NOT TYPICALLY REQUIRED, INSTALL PERMANENT TRENCH PLUGS AT THE SAME SPACING AS IF PERMANENT WATERBARS WERE REQUIRED. (FERC PLAN)

GENERAL NOTES:
1. THE BEST MANAGEMENT PRACTICE (BMP) NUMBERS NOTED ABOVE CORRESPOND TO SPECIFIC DETAILS FOUND ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS. THE BMP DETAILS INCLUDE GENERAL LAYOUT, LOCATION, DIMENSION, CONSTRUCTION, NOTES, MATERIALS, ETC. THAT SHALL BE FOLLOWED DURING CONSTRUCTION OF THE PIPELINE.
2. THE APPROX. LOCATION AND TYPE OF SEDIMENT BARRIERS TO BE INSTALLED ALONG THE CONSTRUCTION WORKSPACE ARE LOCATED IN TABLES ON THE BEST MANAGEMENT PRACTICE DETAIL SHEETS.
3. CONTRACTOR SHALL INSTALL ONLY APPROVED PADEP/NJDEP DETAILS.



SOILS	LAND USE	
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002	1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)
	2. COMMERCIAL / INDUSTRIAL (CI)	
	3. UPLAND FOREST (UF)	
	4. INSTITUTIONAL (IN)	
	5. URBAN (UR)	
	6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)	
	7. RESIDENTIAL (RE)	
	8. ROADWAYS / RAILROADS (RD)	
	9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)	

MATERIAL		
TAG	QUANTITY	DESCRIPTION
1	2540'	PIPE, 36.000" OD X .634" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & COATED
2	40'	PIPE, 36.000" OD X .634" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & 5.2" CC COATED
5	60'	PIPE, 36.000" OD X .761" WT, API 5L PSL-2, X-70, DSAW, INT. FBE & EXT. FBE & ARO COATED

REFERENCE DRAWINGS	
DWG. NO.	TITLE
000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
000-03-09-001 --- 008	TYPICAL E&S DETAILS

REVISIONS					
NO.	REVISIONS	DATE	DRAWN	CK	APPR
A	ISSUED FOR DRAFT RESOURCE REPORT 1	11/4/2014	QPS	QPS	QPS
B	PRELIMINARY ISSUE	12/17/2014	QPS	QPS	QPS
C	FERC DRAFT FILING	4/13/2015	QPS	QPS	QPS
D	FERC FINAL FILING	9/23/2015	HMM	HMM	HMM
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APPROVALS	
DRAWN BY	DATE
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SCALE PLAN: 1" = 100'
SCALE PROFILE H: 1" = 100'
SCALE PROFILE V: 1" = 100'

CLIENT APPROVAL
DATE

PREPARED FOR
PennEast PIPELINE

PREPARED BY
Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
NORTHAMPTON COUNTY, PENNSYLVANIA
STA. 2851+20 TO STA. 2877+60

SCALE	DRAWING NO.	REVISION
1 = 100'	000-03-01-109	G

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OWNERSHIP / FOOTAGE

Station	Parcel	Footage
2877+60 – 2889+25	PE-NO-001.011	1165'
2889+25 – 2890+86	PE-NO-001.014	161'
2890+86 – 2891+25	SR4014	39'
2891+25 – 2894+61	PE-NO-001.016	336'
2894+61 – 2895+24	APPLEBUTTER RD	63'
2895+24 – 2897+57	PE-NO-001.018	233'
2897+57 – 2904+00	PE-NO-001.021	643'

STATIONING

2881+64 P.I. ~ 11°15'00" LT.
2882+04 P.I. ~ 11°15'00" LT.
2882+44 P.I. ~ 11°15'00" LT.
2882+84 P.I. ~ 11°07'34" LT.
2884+43 EDGE OF UNNAME ROAD
2884+71 EDGE OF UNNAME ROAD
2888+72 P.I. ~ 11°07'34" RT.
2889+12 P.I. ~ 11°15'00" RT.
2889+25 PROPERTY LINE
2889+52 P.I. ~ 11°15'00" RT.
2889+92 P.I. ~ 11°48'15" RT.
2890+86 PROPERTY LINE
2890+90 EDGE OF ROAD
2891+10 CENTERLINE OF SR4014
2891+19 EDGE OF ROAD
2891+25 PROPERTY LINE
2894+61 PROPERTY LINE
2894+73 EDGE OF ROAD
2894+85 CENTERLINE OF APPLEBUTTER RD
2894+98 EDGE OF ROAD
2895+24 PROPERTY LINE
2897+21 P.I. ~ 11°48'15" LT.
2897+57 PROPERTY LINE
2897+61 P.I. ~ 11°15'00" LT.
2898+01 P.I. ~ 11°15'00" LT.
2898+41 P.I. ~ 11°48'32" LT.

LAND USE: AG | RD | AG | UF | AG | RD | RE | RD | RE | RD | UF | RE | UF

MATERIAL & COATING

Station range	Length	Tag
2877+60 – 2882+88	528'	3
2882+88 – 2890+76	788'	1
2890+76 – 2891+36	60'	5
2891+36 – 2894+53	317'	1
2894+53 – 2895+33	80'	5
2895+33 – 2904+00	867'	1

SOILS: BkC | BkB | AfB | UusB | BkD | BkB | WkD

ENVIRONMENTAL SITE SPECIFIC E&S

CLASS LOCATION: CLASS III | CLASS II

DESIGN FACTOR: 0.5 | 0.6 | 0.5 | 0.6 | 0.5 | 0.6

MAOP: 1480 PSIG

PROFILE

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TEMPORARY WATERBARS (T)

PERMANENT WATERBAR WITH COMPOST FILTER SOCK AT WATERBAR DISCHARGE (○)

PERMANENT TRENCH PLUG (▲)

WATERBAR SPACING	
SLOPE (%)	SPACING (FT)
<5	250
5 - 15	150
>15 - 30	100
>30	50

TRENCH PLUG SPACING	
SLOPE (%)	SPACING (FT)
<5	1000
5 - 15	500
>15 - 25	300
>25 - 35	200
>35 - 100	100
100	50

TRENCH PLUGS ARE REQUIRED AT ALL WATERBODY AND WETLAND CROSSINGS REGARDLESS OF SLOPE.[1]

SEE FIGURES 16 THRU 21 FOR SPECIFICATIONS.

IN AG FIELDS AND RESIDENTIAL AREAS WHERE WATERBARS ARE NOT TYPICALLY REQUIRED, INSTALL PERMANENT TRENCH PLUGS AT THE SAME SPACING AS IF PERMANENT WATERBARS WERE REQUIRED. (FERC PLAN)

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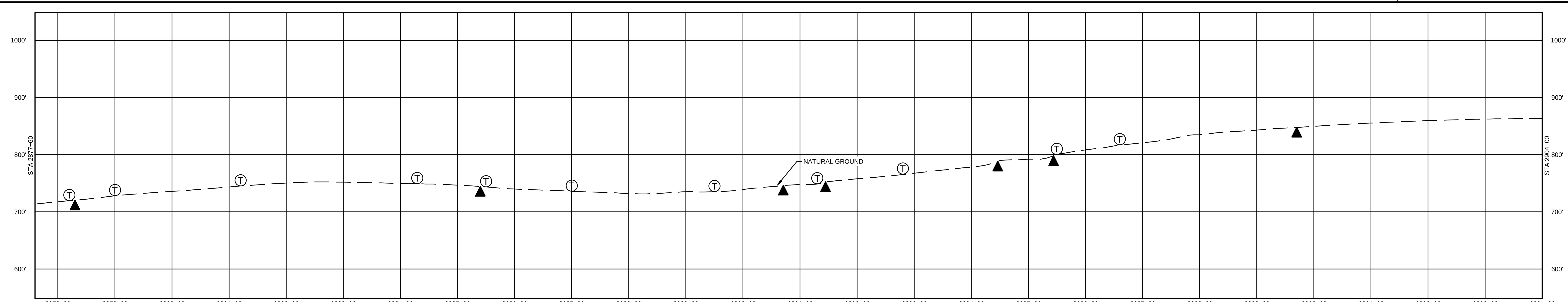

SOILS
FOR SOILS DESCRIPTIONS SEE DWG: 000-01-01-002

LAND USE	
1. AGRICULTURAL (AG)	10. OPEN WATERBODIES (WB / OW)
2. COMMERCIAL / INDUSTRIAL (CI)	
3. UPLAND FOREST (UF)	
4. INSTITUTIONAL (IN)	
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6. OPEN LAND (EXISTING ROW, OPEN FIELDS, NON-AGRICULTURAL) (OL)	
7. RESIDENTIAL (RE)	
8. ROADWAYS / RAILROADS (RD)	
9. SPECIAL LAND USE (CHURCHES, PARKS, ETC) (SP)	

MATERIAL		
TAG	QUANTITY	DESCRIPTION
1	1972'	PIPE, 36.000" OD X .634" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE & COATED
3	528'	PIPE, 36.000" OD X .761" WT, API 5L PSL-2, X-70, DSAW SAWH SPIRAL, INT. FBE & EXT. FBE COATED
5	140'	PIPE, 36.000" OD X .761" WT, API 5L PSL-2, X-70, DSAW, INT. FBE & EXT. FBE & ARO COATED

REFERENCE DRAWINGS	
DWG. NO.	TITLE
000-03-08-001 --- 002	TYPICAL CONSTRUCTION ROW DETAILS
000-03-09-001 --- 008	TYPICAL E&S DETAILS
000-03-02-040 --- 041	RESIDENTIAL SITE SPECIFIC

REVISIONS					
NO.	REVISIONS	DATE	DRAWN	CK	APPR
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CLIENT APPROVAL

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PREPARED FOR: PennEast PIPELINE

PREPARED BY: Hatch Mott MacDonald

PENNEAST PIPELINE PROJECT

ALIGNMENT SHEET
PENNEAST MAINLINE
PROPOSED 36" PIPELINE
NORTHAMPTON COUNTY, PENNSYLVANIA
STA. 2877+60 TO STA. 2904+00

SCALE	DRAWING NO.	REVISION
1 = 100'	000-03-01-110	G

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Document Content(s)

PennEast Errata Letter for Alignment Sheet File.PDF.....1-1

Att G-4_PennEast_Alignments_101-110 (corrected).PDF.....2-11