





- DESIGN AND CONSTRUCTION:

 1. CONTRACTOR SHALL FIELD VERIFY DEPTH OF ALL EXITING UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWNING.

 2. THE MINIMUM SEPARATION DISTANCE FROM EXISTING SUBSURFACE UTILITIES SHALL NOT BE LESS THAN 10 FEET AS MEASURED FROM THE OUTSIDE EDGE OF THE UTILITY TO OUTSIDE OF PROPOSED DEPTH.

- PIPELINE.

 3. DESIGNED IN ACCORDANCE WITH CFR 49 195 & ASME B31.4

 4. CROSSING PIPE SPECIFICATION:
 HDD HORZ, LENGTH (L=), 920'
 HDD PIPE LENGTH (S=): 927'
 20" x 0.456" W.T., X-65, API5L, PSL2, ERW, BFW
 COATING: 14-16 MILS FBE WITH 40 MILS MIN. ARO (POWERCRETE R95)
- INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.50 (HOOP STRESS)). INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD).
 PIPELINE WARRING MARKERS SHALL BE INSTALLED ON BOTH SIDES OF ALL ROAD, RAILWAY, AND
- CARRIER PIPE NOT ENCASED.
- PIPE / AMBIENT TEMPERATURE MUST BE NO LESS THAN 30°F DURING PULLBACK WITHOUT PRIOR WRITTEN APPROVAL FROM THE ENGINEER.
- 10. CONDUCT 4-HOUR PRE-INSTALLATION HYDROTEST OF HDD PIPE STRING TO MINIMUM 1850 PSIG.
- PIPELINE AND CROSSING TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH LAST APPROVED AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION SPECIFICATIONS FOR PIPELINES CONVEYING FLAMMABLE AND NON-FLAMMABLE SUBSTANCES.
- 13. SEE SUNOCO PENNSYLVANIA PIPELINE PROJECT ESRI WEBMAP FOR ACCESS ROAD ALIGNMENT.

NOTES	REF. DRAWING			REVISIONS							
1. ALL COORDINATES SHOWN ARE IN LATITUDE AND LONGITUDE. ALL MSL ELEVATIONS ARE NAD83 2. STATIONING IS BASED ON HORIZONTAL DISTANCES. 3. ROONEY ENGINEERING, INC. AND SUNDCO PIPELINE. LP ARE NOT RESPONSIBLE FOR LOCATION OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROONEY ENGINEERING, INC. AND SUNDCO PIPELINE, LP, FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN. 4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES. CONTACT ONE CALL AT 811 PRIOR TO DIGGING. 5. SUNDCO EMERGENCY HOTLINE NUMBER IS #1-800-788-7440.	ES-2.13	TO ES-2.14	EROSION & SEDIMENT PLAN								
	SHEET 9	TO SHEET 9	AERIAL SITE PLAN	EP1	REVISED PER PADEP COMMENTS	JTW	05/06/16	RMB 05	5/06/16	AAW (05/06/16
				EP		DLM	03/15/16	RMB 03	3/15/16	AAW (03/15/16
				С	ADDED GEOTECH INFO	MRS	09/07/15	RMB 09	9/07/15	AAW (ე9/07/15
				В	ISSUED FOR BID	MRS	07/31/15	RMB 0	7/31/15	AAW (07/31/15
				Α	ISSUED FOR REVIEW	PHK	02/13/15	RMB 02	2/13/15	AAW (02/13/15
	DWG NO	DWG NO	DESCRIPTION	NO.	DESCRIPTION	BY	DATE	CHK	DATE	APP	DATE



SUNOCO PIPELINE, L.P. 20-INCH HORIZONTAL DIRECTIONAL DRILL



NORFOLK SOUTHERN RAILROAD PENNSYLVANIA PIPELINE PROJECT

SCALE: 1"=150' DWG. NO: PA-IN-0019.0000-RR