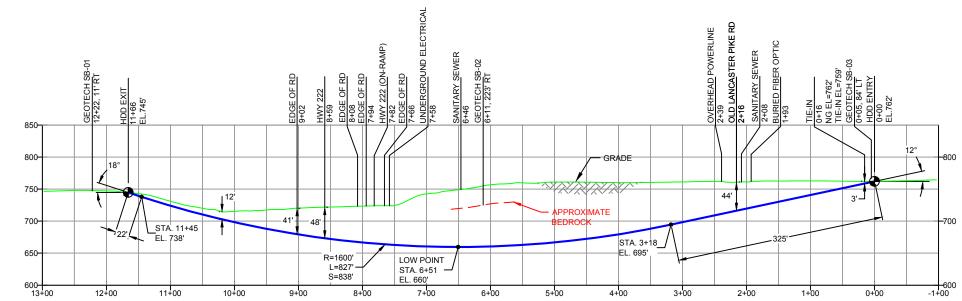


-SM (0.7' - 30.0')

-COMPLETION DEPTH EL. 737'

SAND WITH FINE TO

COARSE GRAVEL



DESIGN AND CONSTRUCTION: CONTRACTOR SHALL FIELD VERIFY DEPTH OF ALL EXITING UTILITIES SHOWN OR NOT SHOWN ON

- THE MINIM IM SEPARATION DISTANCE FROM EXISTING SUBSURFACE LITH THES SHALL NOT BE LESS.
- 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
 PIPELINE.
 DESIGNED IN ACCORDANCE WITH CFR 49 195 & ASME B31.4
 CROSSING PIPE SPECIFICATION:
 HDD HORZ. LENGTH (L=):1166'
 HDD PIPE LENGTH (S=):1166'
 10 436' W.T., X-70, APISL, PSL2, ERW, BFW
 COATING: 14.16 MIS SEPE WITH 20.35 MIL ABO (POWERCRETE R95)

- INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.50).
- INTERNAL DESIGN PRESSURE 1400 PSIG (SERIP PACTOR 1), DESIGN FACTOR (33), INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD).
 PIPELINE WARNING MARKERS SHALL BE INSTALLED ON BOTH SIDES OF ALL ROAD, RAILWAY, AND STREAM GROSSINGS.

- STREAM CROSSINGS.

 8. CARRIER PIPE NOT ENCASED.

 9. 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.

 11. SEE SUNOCO PENNSYLVANIA PIPELINE PROJECT ESRI WEBMAP FOR ACCESS ROAD ALIGNMENT.
- 12. SUNOCO PIPELINE, L.P.'S HORIZONTAL DIRECTIONAL DRILL INADVERTENT RETURN CONTINGENCY PLAN WILL BE IMPLEMENTED AT ALL TIMES.
 SUNOCO PIPELINE, L.P.'S EROSION AND SEDIMENTATION CONTROL PLAN WILL BE IMPLEMENTED AT ALL

NOTE: REFER TO TEST BORING LOG <u>\$3-0200</u> FOR COMPLETE SOIL MATERIAL DESCRIPTION			16" x 0.438" W.T., X-70, A COATING: 14-16 MILS FI		11. SEE SUNOCO PENNSYLVANIA PIPELINE PROJECT ESRI WEBMAP FOR ACCESS ROAD ALIG						
NOTES	REF. DRAWING			REVISIONS							
ALL COORDINATES SHOWN ARE IN LATITUDE AND LONGITUDE. ALL MSL ELEVATIONS ARE NAD83 ACTATION NO 10 PAGE ON LICENSANTAL PROTANCES.	ES-5.27	TO ES-5.28	EROSION & SEDIMENT PLAN								
OF FOREIGN UTILITIES SHOWN IN PLOT PLAN OR PROFILE. THE INFORMATION SHOWN HEREON IS FURNISHED WITHOUT LIABILITY ON THE PART OF ROOMY ENGINEERING, INC. AND SUNOCO PIPELINE, LP, FOR ANY DAMAGES RESULTING FROM ERRORS OR OMISSIONS THEREIN.	SHEET 15	TO SHEET 16	AERIAL SITE PLAN	EP2	REVISED PER PADEP COMMENTS RECEIVED 09-06-16	MRS	10/21/16	RMB	10/21/16	AAW 1	.0/21/16
				EP1	REVISED PER PADEP COMMENTS	JTW	05/09/16	RMB	05/09/16	AAW 0)5/09/16
				EP		MRS	11/23/15	RMB	11/23/15	AAW 1	11/23/15
4. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UTILITIES. CONTACT ONE CALL AT 811 PRIOR TO DIGGING				В	ADDED GOETECH INFO	MRS	09/25/15	RMB	09/25/15	AAW 0)9/25/15
5. SUNOCO EMERGENCY HOTLINE NUMBER IS #1-800-786-7440.				Α	ISSUED FOR BID	MRS	08/31/15	RMB	08/31/15	AAW 0)8/31/15
	DWG NO	DWG NO	DESCRIPTION	NO.	DESCRIPTION	BY	DATE	CHK	DATE	APP	DATE



16-INCH HORIZONTAL DIRECTIONAL DRILL HWY 222 PENNSYLVANIA PIPELINE PROJECT

TETRA TECH ROONEY (303) 792-5911 SCALE: 1"=150'

DWG. NO: PA-BR-0075.0000-RD-16

SUNOCO PIPELINE, L.P.