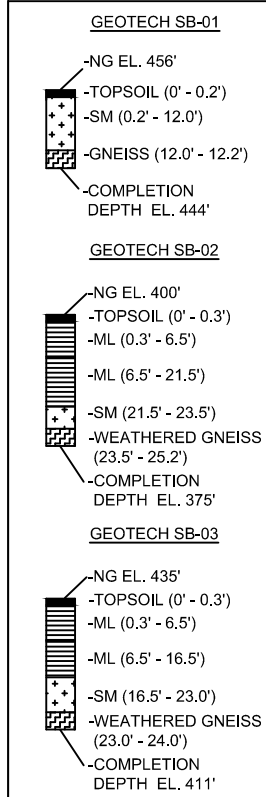


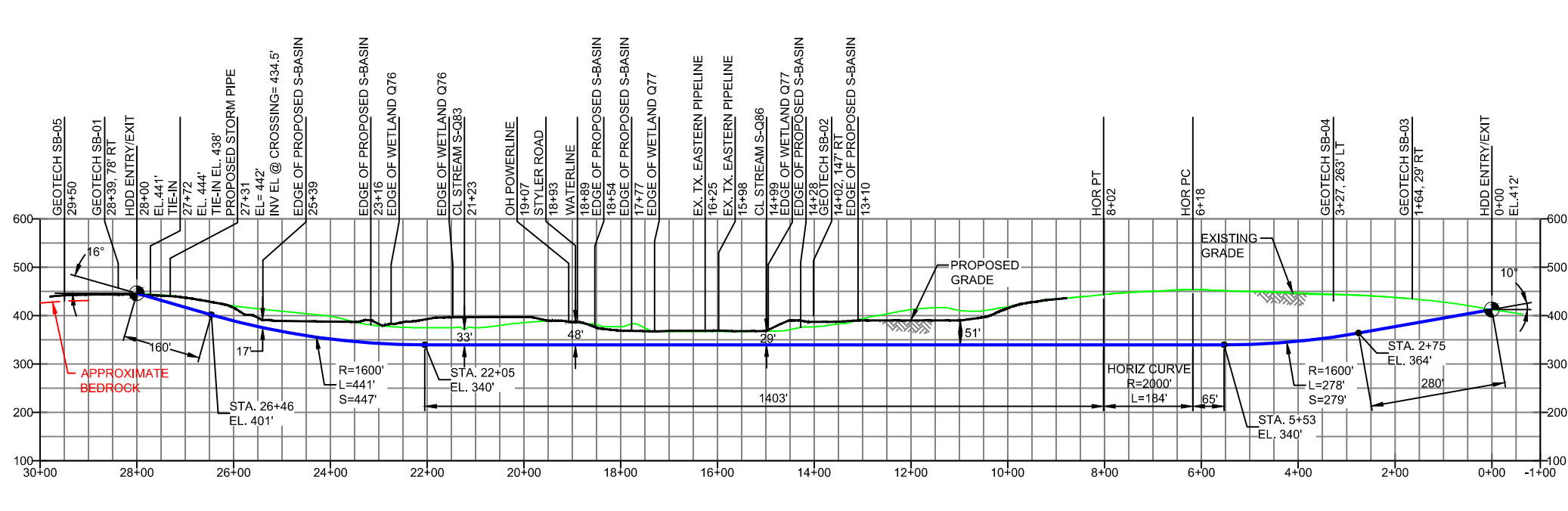
CHASTER COUNTY, PA - UPPER UWCHLAN TOWNSHIP
S3-0280-16



NOTE: REFER TO TEST BORING LOG S3-0280 FOR COMPLETE SOIL MATERIAL DESCRIPTION

- NOTES**
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 SUNOCO 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 SUNOCO 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. SUNOCO EMERGENCY HOTLINE NUMBER IS 1-800-786-7440.

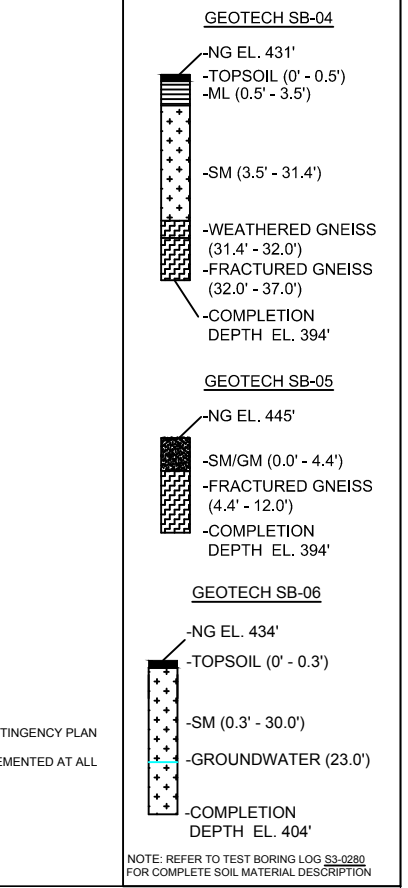
PROFILE VIEW



- DESIGN AND CONSTRUCTION:**
1. CONTRACTOR SHALL FIELD VERIFY DEPTH OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING.
 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 PIPELINE.
 3. DESIGNED IN ACCORDANCE WITH CFR 49 195 & ASME B31.4
 4. CROSSING PIPE SPECIFICATION:
HDD HORZ. LENGTH (L)= 2800'
HDD PIPE LENGTH (S_p)= 2819'
16" x 0.438" W.T., X-70, API 5L, PSL2, ERW, BFW
COATING: 14-16 MILS FBE WITH 30-35 MIL ARO (POWERCRETE R95)
 5. INTERNAL DESIGN PRESSURE 1480 PSIG (SEAM FACTOR 1.0, DESIGN FACTOR 0.50).
 6. INSTALLATION METHOD: HORIZONTAL DIRECTIONAL DRILL (HDD).
 7. PIPELINE WARNING MARKERS SHALL BE INSTALLED ON BOTH SIDES OF ALL ROAD, RAILWAY, AND 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.
 13. SUNOCO PIPELINE, L.P.'S EROSION AND SEDIMENTATION CONTROL PLAN WILL BE IMPLEMENTED AT ALL TIMES.

LEGEND

PERMANENT ROW	TEMPORARY CONSTRUCTION ROW	TEMPORARY WORKSPACE	TEMPORARY ACCESS ROAD	PERMANENT ACCESS ROAD	SPOIL SPACE ONLY	PROPOSED HDD	PROPOSED 20" PIPELINE	PROPOSED 16" PIPELINE	HDD ENTRY/EXIT	PEM WETLANDS	PSS WETLANDS	PFO WETLANDS
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REF. DRAWING			REVISIONS		
ES-6.24	TO	ES-6.26	EROSION & SEDIMENT PLAN		
SHEET 14	TO	SHEET 15	AERIAL SITE PLAN		
			EP2	REVISED PER PADEP COMMENTS RECEIVED 09-06-16	MRS 10/07/16 RMB 10/07/16 AAW 10/07/16
			EP1	REVISED PER PADEP COMMENTS	MRS 05/09/16 RMB 05/09/16 AAW 05/09/16
			EP		MRS 02/26/16 RMB 02/26/16 AAW 02/26/16
			0	ISSUED FOR CONSTRUCTION	MRS 02/19/16 RMB 02/19/16 AAW 02/19/16
DWG NO	DWG NO	DESCRIPTION	NO.	DESCRIPTION	BY DATE CHK DATE APP DATE

Sunoco Logistics Partners L.P.

TETRA TECH ROONEY
(303) 792-5911

SUNOCO PIPELINE, L.P.

16-INCH HORIZONTAL DIRECTIONAL DRILL
PENNSYLVANIA TURNPIKE 76
PENNSYLVANIA PIPELINE PROJECT

SCALE: 1"=300' DWG. NO: PA-CH-0088.0000-RD-16