

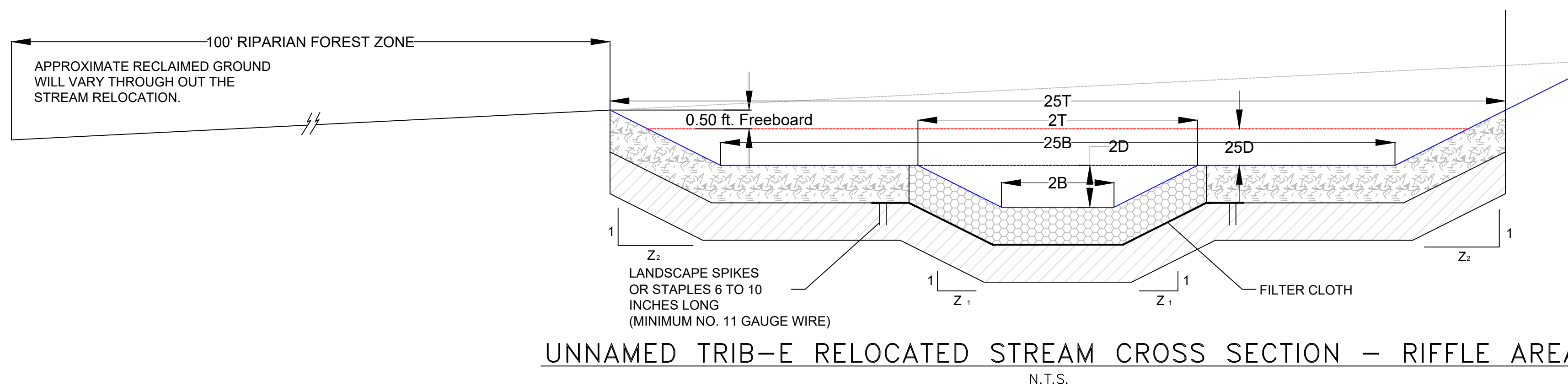
RIPARIAN VEGETATION: INITIALLY THE AREA WILL BE PLANTED WITH THE PERMANENT GRASS SEED MIXTURE NO. 2 AS LISTED IN THE MODULE 23 OF THE APPROVED PERMIT UNTIL THE BACKFILLING ADVANCES FAR ENOUGH TO BEGIN THE RELOCATED STREAM CONSTRUCTION. ONCE CONSTRUCTED THE RIPARIAN FOREST ZONE WILL BE PLANTED WITH THE WOODY PLANT MIX AS FOLLOWS:

ZONE 1 - 20' WIDTH FROM THE EDGE OF THE STREAM BANK - TOTAL 1.7 AC.:

- SILVER MAPLE: 100/AC 8'X9' CENTERS ALTERNATING ROWS
- RED ASH: 100/AC 8'X9' CENTERS ALTERNATING ROWS
- BLACK WILLOW: 100/AC 8'X9' CENTERS ALTERNATING ROWS
- PIN OAK: 100/AC 8'X9' CENTERS ALTERNATING ROWS
- RED OZIER DOGWOOD: 100/AC 8'X9' CENTERS ALTERNATING ROWS
- NINEBARK: 100/AC 8'X9' CENTERS ALTERNATING ROWS

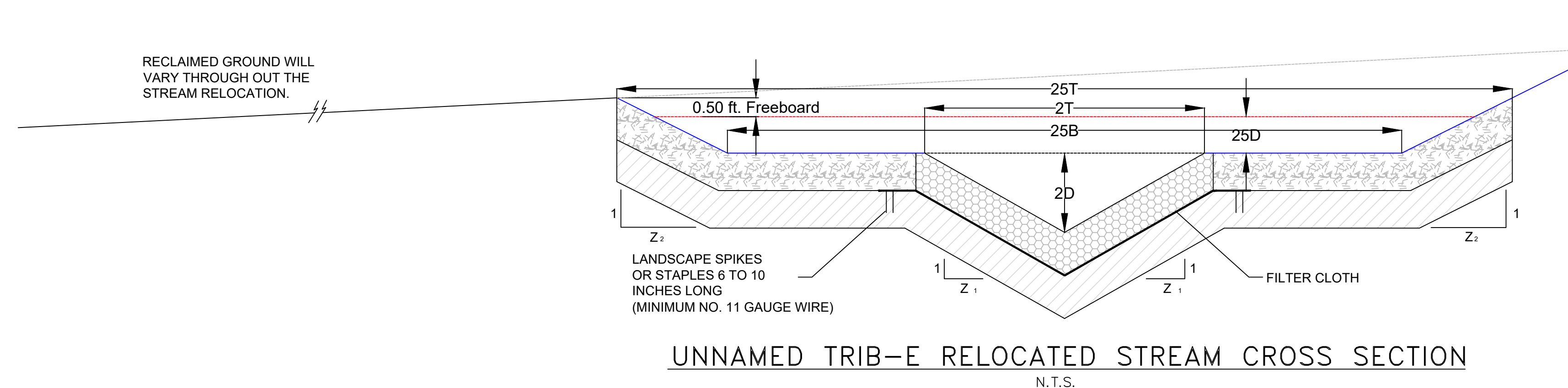
ZONE 2 - REMAINING 80' OF RIPARIAN FOREST ZONE - TOTAL 6.6 AC.:

- WHITE ASH: 100/AC 8'X9' CENTERS ALTERNATING ROWS
- BRISTLY LOCUST: 150/AC 8'X9' CENTERS ALTERNATING ROWS
- RED OAK: 100/AC 8'X9' CENTERS ALTERNATING ROWS
- RED MAPLE: 50/AC 8'X9' CENTERS ALTERNATING ROWS
- BLACK CHERRY: 50/AC 8'X9' CENTERS ALTERNATING ROWS
- NINEBARK: 100/AC 8'X9' CENTERS ALTERNATING ROWS
- YELLOW BIRCH: 50/AC 8'X9' CENTERS ALTERNATING ROWS



LEGEND

- SUBSTRATE MATERIAL CONSISTING OF: 50% RIPRAP R-4
- RIPRAP 25% RIPRAP R-2
- CLAY LINER 25% AASHTO #67 STONE MIN. 2.0\"/>

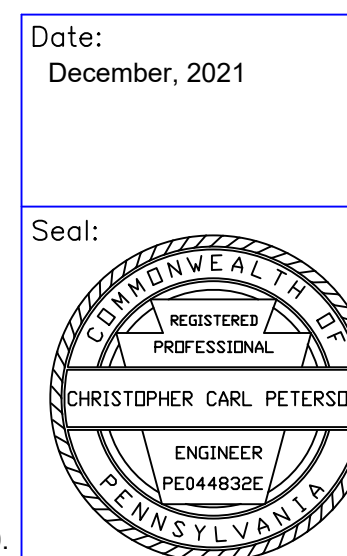


- NOTES:
- REVEGETATE IMMEDIATELY AFTER SOIL DISTURBANCE TO TAKE ADVANTAGE OF EXISTING SOIL MOISTURE.
 - STREAM CHANNEL IS TO BE CLEARED WITH A BLADE AND FINISHED BY HAND.
 - CHANNEL SLOPES SHALL MAINTAIN UNIFORM GRADE
 - PLACE 2' MIN COMPACTED CLAY UNDER LINING THE ENTIRE LENGTH OF THE RELOCATED STREAM.

STATIONS	2 YR Q (cfs.)	25 YR Q (cfs.)	2 YR V (ft./s.)	25 YR V (ft./s.)	SLOPE (PERCENT)	2 YR 2B (ft.)	25 YR 2B (ft.)	2 YR Flow Depth 2D (ft.)	25 YR Flow Depth 25D (ft.)	Z ₁	Z ₂	2T (ft.)	25T (ft.)	*t (in.)	25 YR CHANNEL LINING
0+00 - 2+00	27.3	190.70	3.50	6.72	4.0	0.0	20.0	1.45	2.33	3	2	20.73	26.01	12.0	RIPRAP R-4 18" MIN
2+00 - 4+00	26.00	188.10	5.74	8.21	4.7	3.0	20.0	0.83	1.78	3	2	7.96	23.13	12.0	RIPRAP R-3 9" MIN
4+00 - 6+00	25.50	186.80	3.25	6.10	2.2	0.0	20.0	1.44	2.41	3	2	20.74	26.53	12.0	RIPRAP R-4 18" MIN
6+00 - 7+00	24.80	184.90	4.55	6.73	3.8	3.0	20.0	0.94	1.98	3	2	8.63	23.92	12.0	RIPRAP R-4 18" MIN

* SUBSTRATE MATERIAL 2 YR FLOW CHANNEL ONLY

Revisions subsequent to February 1, 2019 by: GeoTech Engineering, Inc.
 Revisions subsequent to May 11, 2012 by: Hiser Engineering, Inc.
 Original mapping by Earthtech, Inc. Uniontown PA office, dated 11/5/2010.



Neiswonger Construction, Inc.
 17592 Route 322, Strattanville, PA 16258
 Phone: (814) 764-3455

Maggie Lynn Underground Mine
 Permit No.:63192001

Exhibit 14.1.E.3: Streams - Relocated / Reconstructed UNT "E" Typicals

Deemston Borough Washington County

Date: December, 2021

Seal:

Revisions: December, 2023

Prepared By:

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