

NOTES FOR GABION-FACED MECHANICALLY STABILIZED EARTH (MSE) WALL

1. MATERIAL PROPERTIES

FURNISH ASSEMBLE AND FILL WOVEN WIRE MESH BASKETS WITH ROCK TO FORM THE GABION FACE AS SPECIFIED IN SECTION 526 IN CONFORMITY WITH THE DIMENSIONS, LINES, AND GRADES SHOWN ON THE DRAWINGS.

THE GEOSYNTHETIC REINFORCEMENT SHALL BE COMPOSED OF HIGH TENACITY POLYESTER OR HIGH-DENSITY POLYETHYLENE MATERIAL AS SPECIFIED IN SECTION 526. THE GEOSYNTHETIC REINFORCEMENT SHALL BE RESISTANT TO ULTRAVIOLET DEGRADATION, INERT TO BIOLOGICAL DEGRADATION AND RESISTANT TO NATURALLY ENCOUNTERED CHEMICALS. THE GEOSYNTHETIC REINFORCEMENT SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT, AND SHALL HAVE A MINIMUM ULTIMATE STRENGTH OF 7000 LB/FT PER TEST METHOD GRIGGI. THE GEOSYNTHETIC REINFORCEMENT PRODUCT SHALL BE APPROVED BY THE ENGINEER, A TYPE D CERTIFICATE SHALL BE FURNISHED IN ACCORDANCE WITH SUBSECTION 700.02.

GRANULAR BORROW (MODIFIED) SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE SIZE	% PASSING
15 INCH	100
NO.4	20 - 100
NO.200	0 - 12

THE GEOTEXTILE USED UNDER STONE FILL AND BEHIND THE GABION FACE SHALL MEET THE REQUIREMENTS OF VAOT STANDARD SPECIFICATION 649.31, GEOTEXTILE UNDER STONE FILL, AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.

2. HANDLING AND STORAGE

UPON DELIVERY AT THE SITE, ALL GEOSYNTHETIC REINFORCEMENT MATERIALS SHALL BE INSPECTED TO ENSURE PROPER MATERIAL STRENGTHS. A PRODUCT CERTIFICATION SHOULD BE PROVIDED WITH EACH SHIPMENT, STATING THAT THE MATERIAL CONFORMS TO PRODUCT SPECIFICATIONS PUBLISHED BY THE SUPPLIER. FOR EASE OF INSTALLATION, THE PRODUCT SHOULD BE STORED ABOVE -10 DEGREES F DURING WINTER MONTHS. CARE SHOULD BE TAKEN TO PREVENT MUD, WET CEMENT, EPOXY, AND OTHER SIMILAR MATERIALS, WHICH MAY PERMANENTLY AFFIX THEMSELVES TO GRIDWORK, FROM COMING IN CONTACT WITH THE GEOSYNTHETIC REINFORCEMENT.

3. GEOSYNTHETIC REINFORCEMENT PLACEMENT

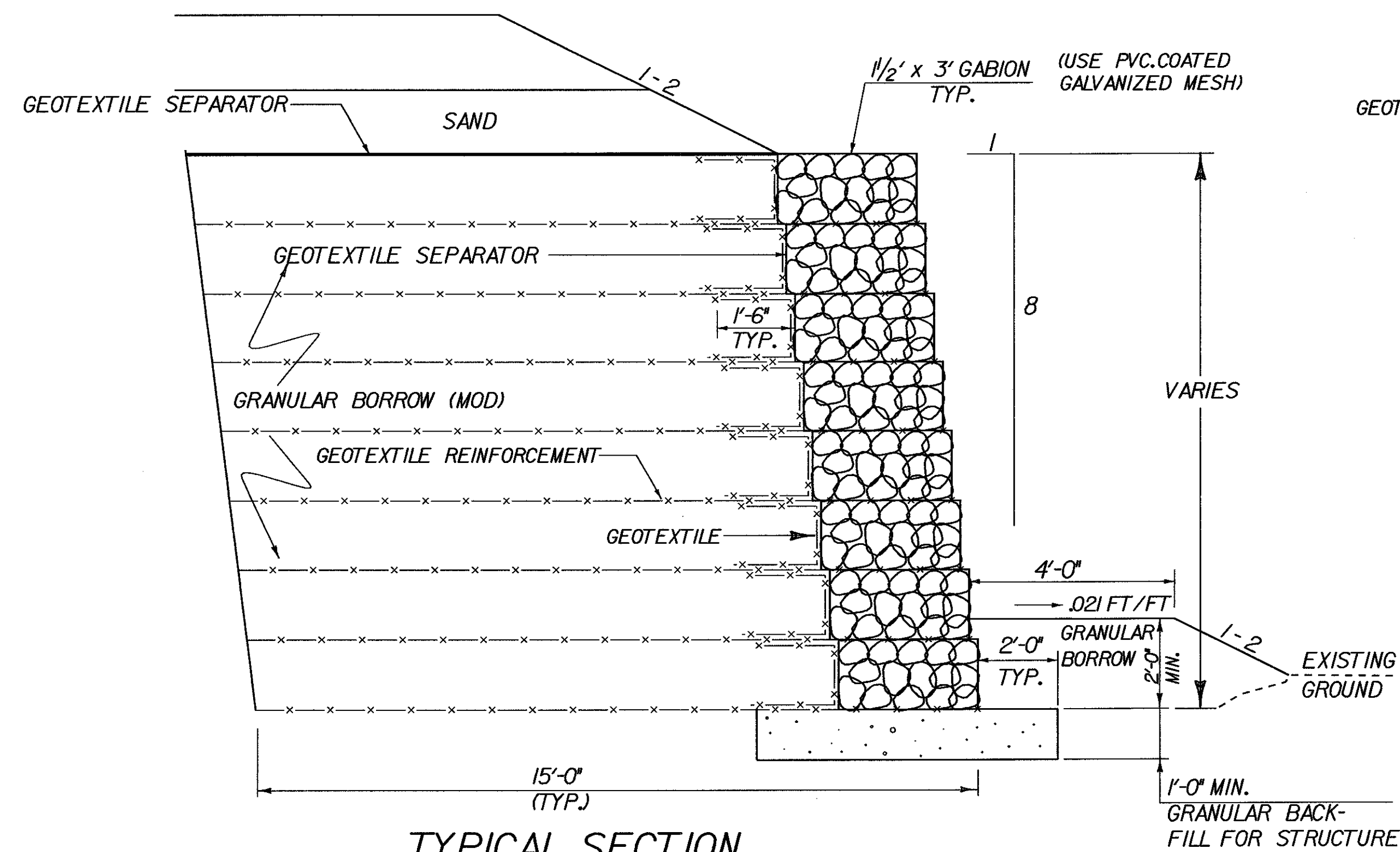
PRIOR TO PLACING THE GEOSYNTHETIC REINFORCEMENT, THE EXCAVATION SHALL BE CLEANED OF ALL EXCESS MATERIAL AND THE FOUNDATION BASE PROOFROLLED TO PROVIDE A UNIFORM AND FIRM SURFACE. THE GEOSYNTHETIC REINFORCEMENT MUST BE PLACED WITH THE DESIGN STRENGTH DIRECTION PERPENDICULAR TO THE WALL FACE. THE GEOSYNTHETIC REINFORCEMENT SHALL EXTEND BACK FROM THE EXPOSED FACE OF THE WALL TO THE DISTANCE SPECIFIED ON THE PLANS. GEOSYNTHETIC REINFORCEMENT SHALL BE PLACED TO LAY FLAT AND PULLED TIGHT PRIOR TO BACKFILLING. PULL GEOSYNTHETIC REINFORCEMENT TIGHT WITH UNIFORM TENSION, USING A MECHANICAL RAKE WITH HINGE IN THE MIDDLE, AS A TENSIONING DEVICE, TO REMOVE ALL WRINKLES IN THE GEOSYNTHETIC REINFORCEMENT. PINS OR SMALL PILES OF SOIL SHALL BE USED TO HOLD THE GEOSYNTHETIC REINFORCEMENT IN POSITION UNTIL THE SUBSEQUENT SOIL LAYER CAN BE PLACED. ADJACENT GEOSYNTHETIC REINFORCEMENT SHOULD BE BUTTED TOGETHER SIDE-BY-SIDE WITHOUT OVERLAP.

4. REINFORCED BACKFILL PLACEMENT AND COMPACTION

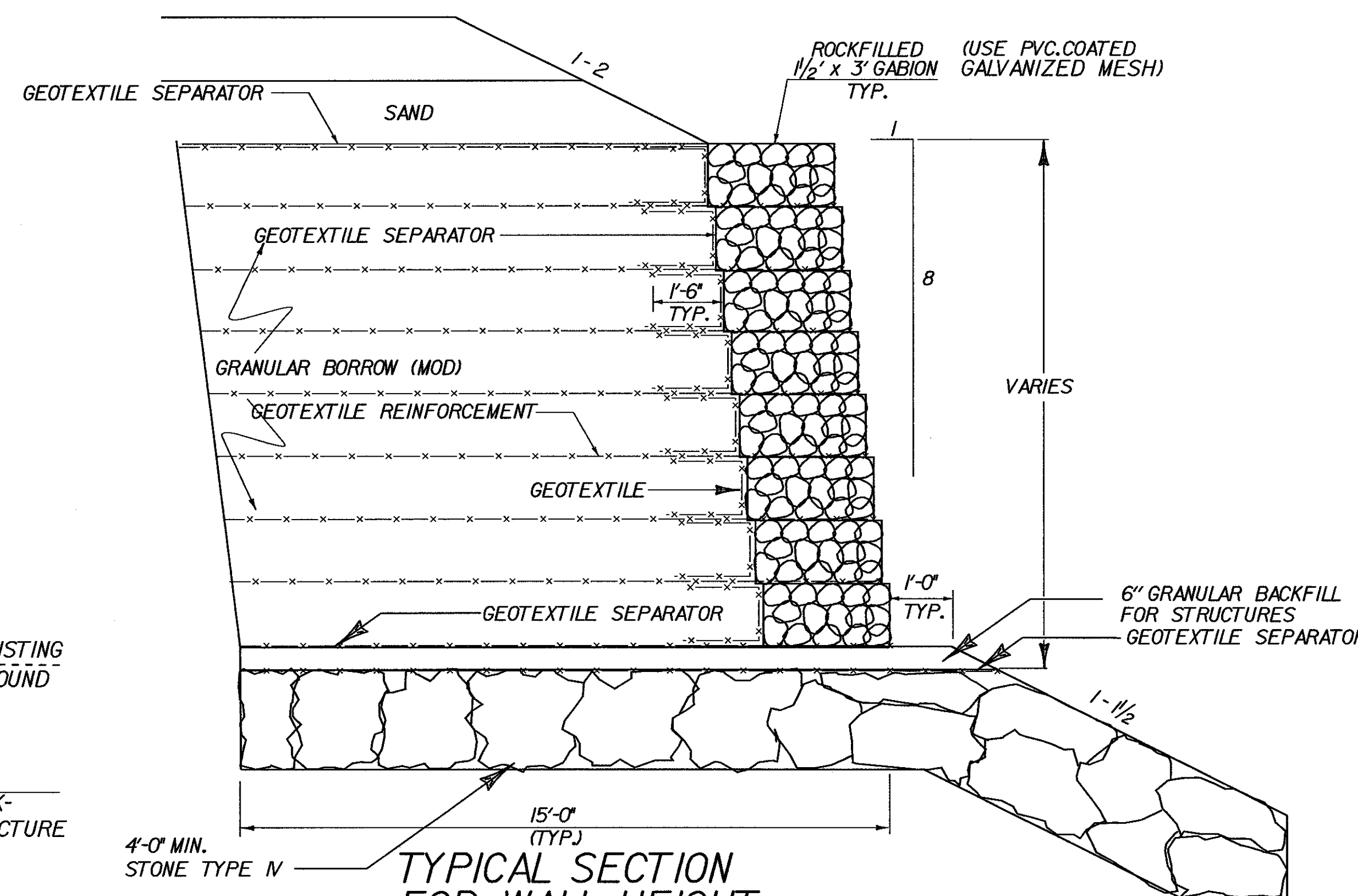
GRANULAR BORROW (MOD) SHALL BE PLACED AND SPREAD DIRECTLY UPON THE GEOSYNTHETIC REINFORCEMENT. EXTREME CARE SHALL BE TAKEN TO PREVENT WRINKLES AND/OR SLIPPAGE OF GEOSYNTHETIC REINFORCEMENT DURING GRANULAR BORROW (MOD) PLACEMENT AND SPREADING. WHEN PRACTICAL, GRANULAR BORROW (MOD) SHALL BE PLACED IN THE DIRECTION IN WHICH THE GEOSYNTHETIC REINFORCEMENT WAS LAID OUT TO ADD TENSIONING. IF GRANULAR BORROW (MOD) IS PLACED TRANSVERSE TO THE ROLL LENGTH, SLIGHT (4 INCHES) OVERLAPS BETWEEN ROLL WIDTHS WITH THE TOP PIECE OF GEOSYNTHETIC REINFORCEMENT BEING THE FIRST TO RECEIVE GRANULAR BORROW (MOD) WILL PREVENT PERMANENT FOLDING OF REINFORCEMENT. RUBBERTIRED EQUIPMENT WILL BE ALLOWED TO PASS OVER BARE GEOSYNTHETIC REINFORCEMENT AT SLOW SPEEDS (LESS THAN 10 MPH) AND WITHOUT SUDDEN BRAKING. TRACK EQUIPMENT SHALL NOT BE ALLOWED ONTO BARE REINFORCEMENT. THERE SHALL BE A MINIMUM OF 6 INCHES OF GRANULAR BORROW (MOD) ON TOP OF THE GEOSYNTHETIC REINFORCEMENT BEFORE TRACK EQUIPMENT CAN BE OPERATED. EACH LIFT OF GRANULAR BORROW (MOD) SHALL BE COMPACTED TO 95% OF AASHTO T-99.

5. EROSION MATTING

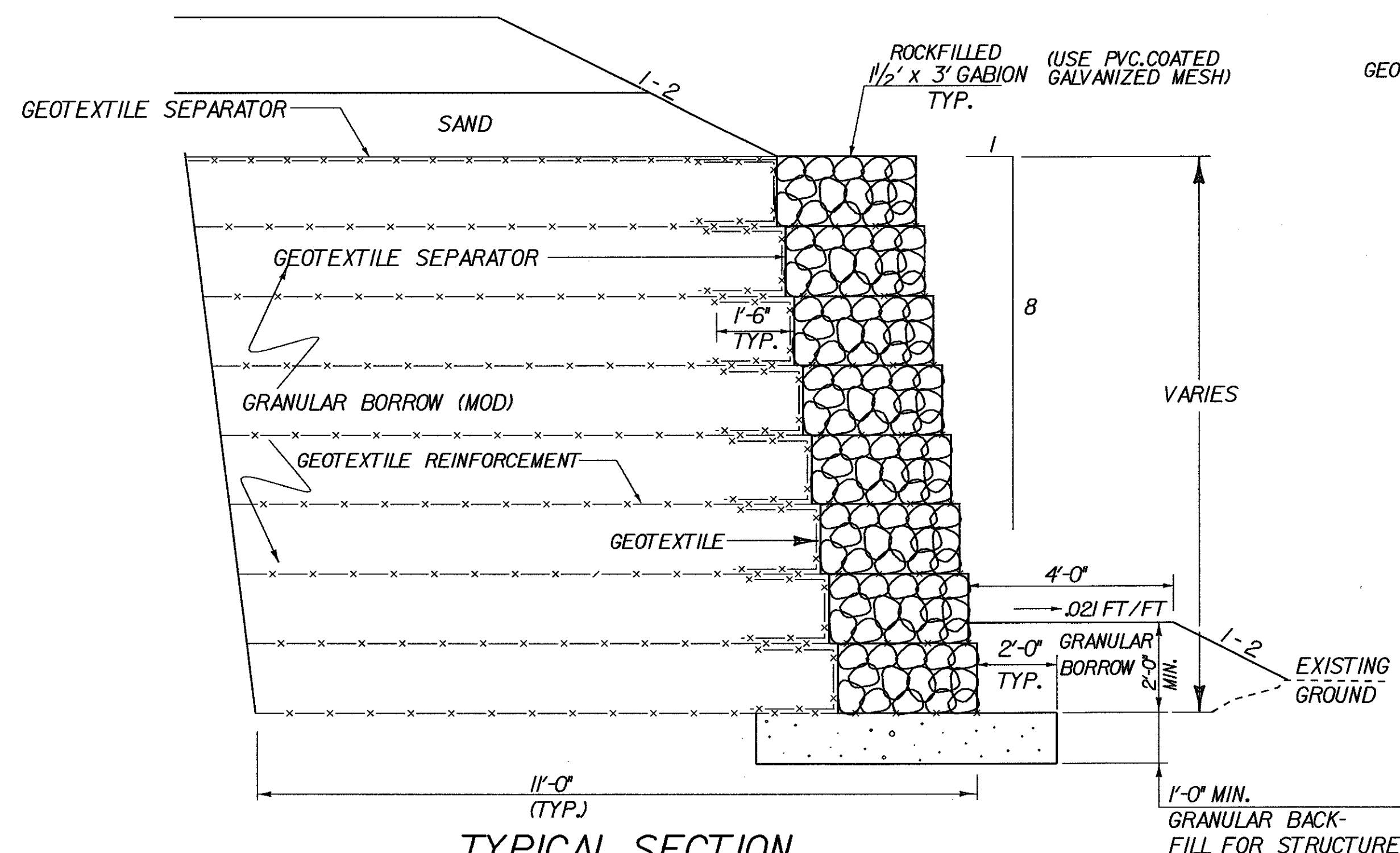
TURF ESTABLISHMENT SHALL CONFORM TO SECTION 651 WITH THE EXCEPTION THAT TOPSOIL SHALL BE SPREAD EVENLY TO A DEPTH, AFTER COMPACTION, OF APPROXIMATELY 6 INCHES (MIN) ON 1:2 SLOPES OR STEEPER. EROSION MATTING (MOD) SHALL BE PLACED ON COMPACTED TOPSOIL AND LAID OUT PARALLEL TO THE FLOW OF WATER OR VERTICALLY ON SLOPES. ACCEPTABLE EROSION MATTINGS (MOD) SHALL BE TENSAR EROSION MAT TM 3000 OR SYNTHETIC INDUSTRIES LANDLOK TM 1061. ANCHOR PINS SHALL BE 15 INCH LONG METAL PINS. METAL PINS SHALL BE 0.20-INCH DIAMETER STEEL WITH A 2-INCH DIAMETER WASHER SECURED TO THE HEAD OF THE PIN. EROSION MATTING (MOD) SHALL BE SECURED AT THE TOP AND BOTTOM OF SLOPES AND AT 3-FOOT INTERVALS HORIZONTALLY AND VERTICALLY ALONG SLOPE. ANCHOR TRENCH ALONG THE TOP OF THE SLOPE SHALL BE BACKFILLED AND COMPACTED WITH DENSE GRADED CRUSHED STONE.



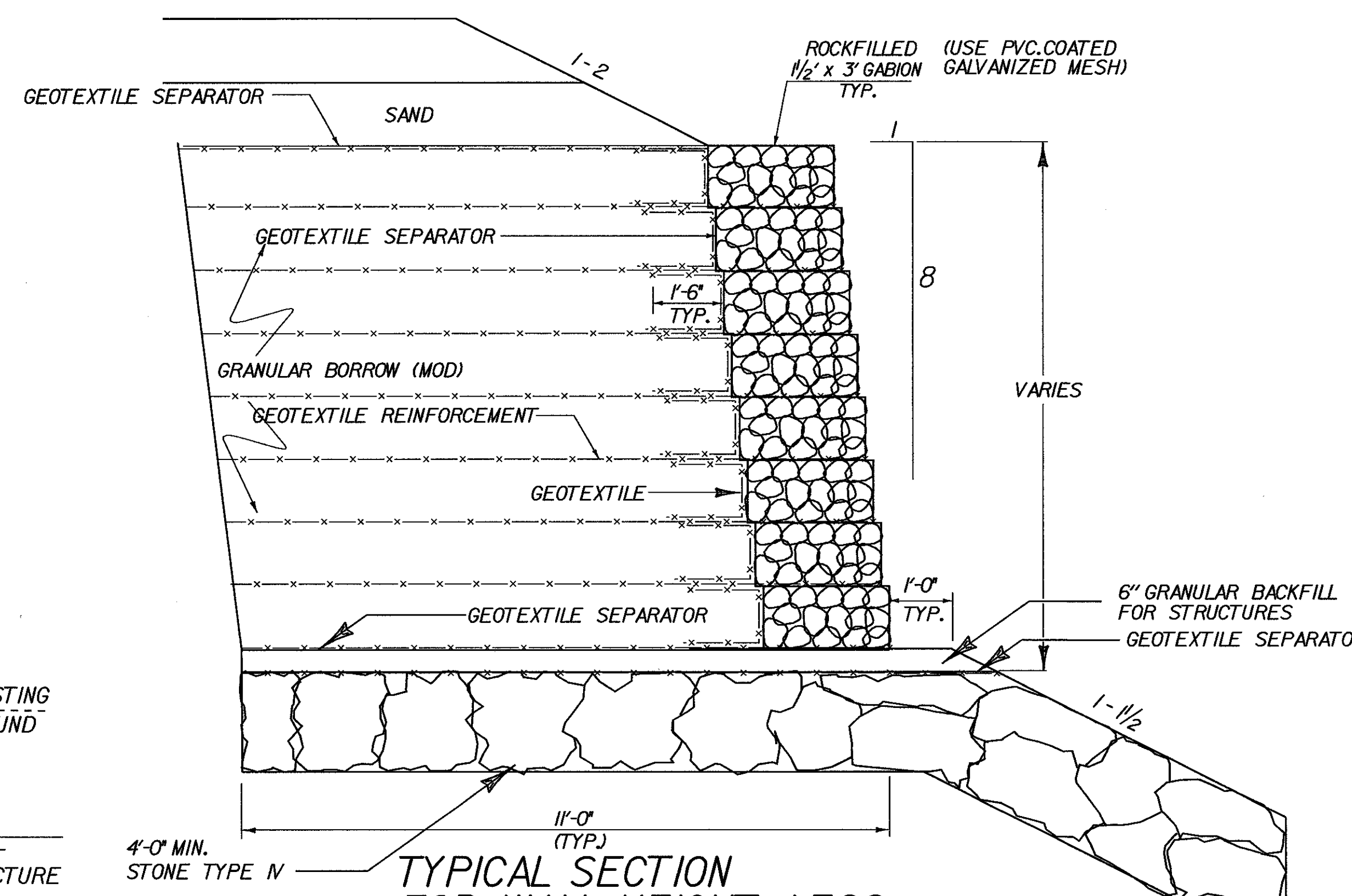
TYPICAL SECTION FOR WALL HEIGHT GREATER THAN 10.5' ML STA. 145+68 - 147+28 RT.



TYPICAL SECTION FOR WALL HEIGHT GREATER THAN 10.5' ML STA. 148+75 - 152+25 RT.



TYPICAL SECTION FOR WALL HEIGHT LESS THAN OR EQUAL TO 10.5' ML STA. 145+68 - 147+28 RT.



TYPICAL SECTION FOR WALL HEIGHT LESS THAN OR EQUAL TO 10.5' ML STA. 148+75 - 152+25 RT.

NOT TO SCALE

PROJECT NAME:	SEARSBURG-WILMINGTON
PROJECT NUMBER:	NHF 010-1(18)
FILE NAME:	mdeslgn/78d096/dd096.dgn
PROJECT LEADER:	DELLA SANTA
DESIGNED BY:	SQUAD B
PLOT DATE:	06-FEB-2002
DRAWN BY:	SQUAD B
CHECKED BY:	
SHEET	286 OF 435