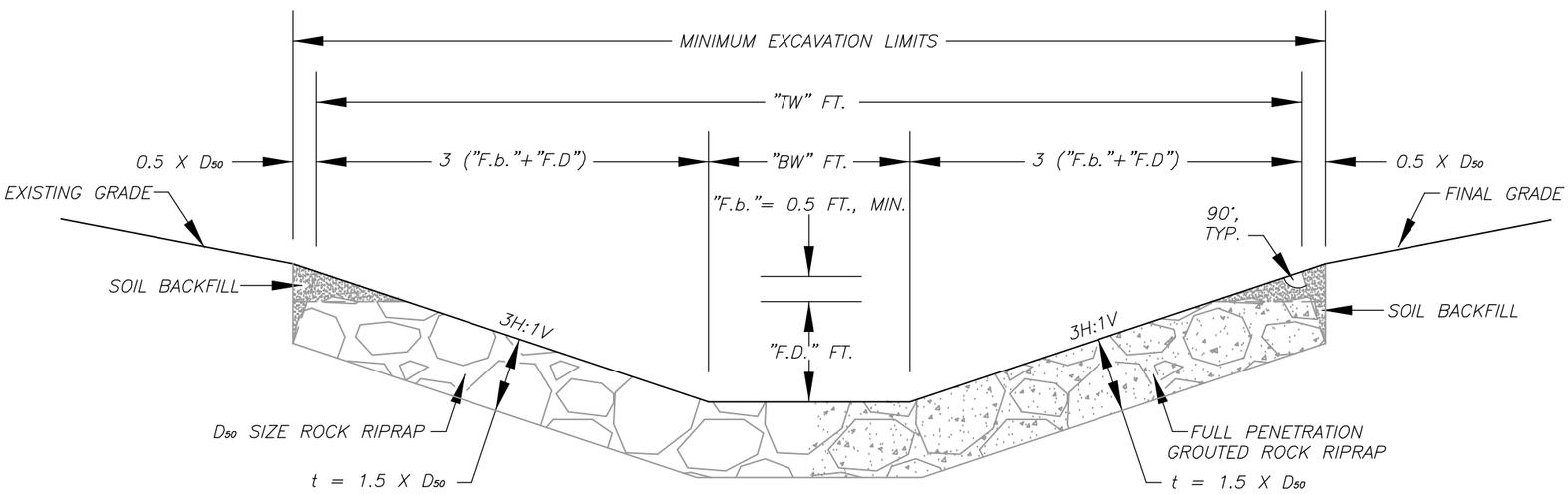
NOTES:
PROVIDE RIPRAP LINING OR GROUTED RIPRAP LINING.

PLACE ROCK RIPRAP FULL WIDTH OF EXCAVATION LIMITS TO THE DESIGNED FLOW DEPTH (FD).

"TW" = TOP WIDTH
"Fb" = FREEBOARD DEPTH
"F.D." = FLOW DEPTH
"t" = THICKNESS

ROCK RIPRAP SIZING

GRADATION	D_{50}=6"	D_{50}=12"	D_{50}=18"	D_{50}=24"
50%	6" – 9"	12" – 18"	18" – 27"	24" – 36"
35%	3" – 6"	6" – 12"	9" – 18"	12" – 24"
15%	<= 3"	3" – 6"	4.5" – 9"	6" – 12"



DETAIL XX
RIPRAP OR GROUTED RIPRAP 3H:1V "TRAPEZOIDAL" CHANNEL

SCALE: 1" = 3 FEET

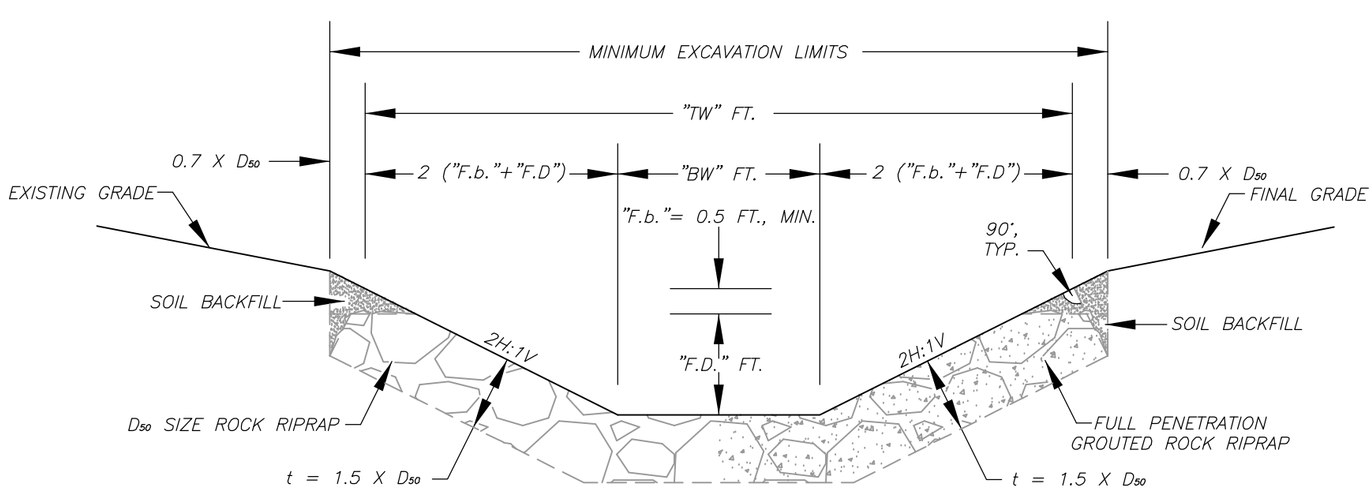
NOTES:
PROVIDE RIPRAP LINING OR GROUTED RIPRAP LINING.

PLACE ROCK RIPRAP FULL WIDTH OF EXCAVATION LIMITS TO THE DESIGNED FLOW DEPTH (FD).

"TW" = TOP WIDTH
"Fb" = FREEBOARD DEPTH
"F.D." = FLOW DEPTH
"t" = THICKNESS

ROCK RIPRAP SIZING

GRADATION	D_{50}=6"	D_{50}=12"	D_{50}=18"	D_{50}=24"
50%	6" – 9"	12" – 18"	18" – 27"	24" – 36"
35%	3" – 6"	6" – 12"	9" – 18"	12" – 24"
15%	<= 3"	3" – 6"	4.5" – 9"	6" – 12"



DETAIL XX
RIPRAP OR GROUTED RIPRAP 2H:1V "TRAPEZOIDAL" CHANNEL

SCALE: 1" = 3 FEET