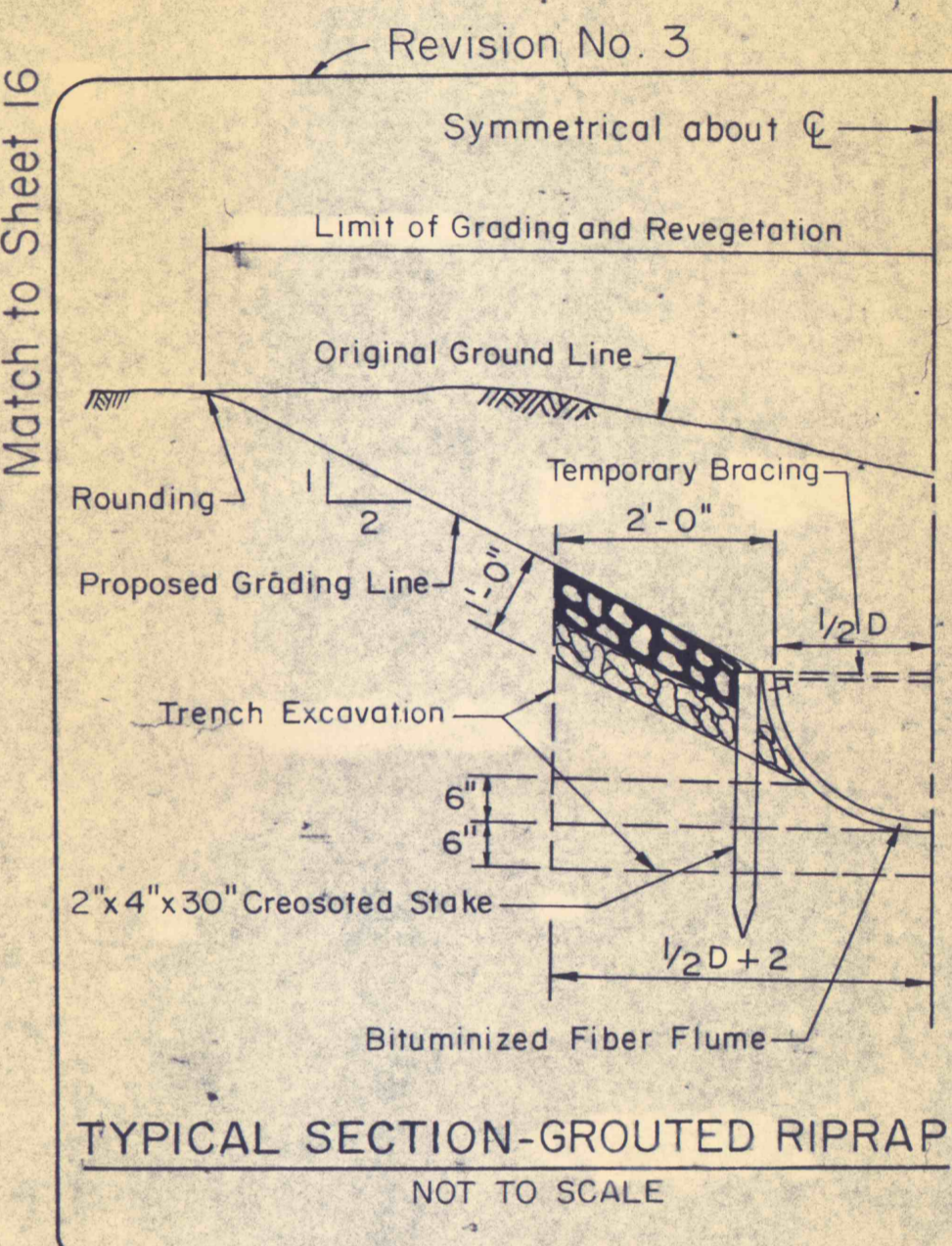


B.M. # 16 Elevation 1189.70
Spike & Washers in top of 6" Oak Stump

B.M. # 17 Elevation 1213.53
Spike & Washers in top of 10" Oak Stump

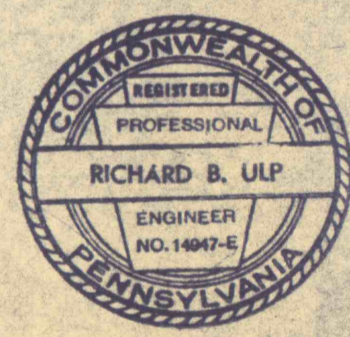


NO	DATE	REVISION	APPR.
1	5-29-75	Added Details & Indicated Locations of Mine & Test Hole - Changed Grading & Revegetation Limits & Limit of Contractor's Working Area	RBC
2	10-6-75	Added 24" B.C.C.G.M.P. Culvert in Southwest Diversion Ditch	RBC
3	11-10-75	Added Typical Section - Grouted Riprap Delete Revision No. 1 - Revise Flume Sta. 2+20 to 11+92	RBC
4	3-1-76	Changed to Channel Clearing Sta. 132+65 to 133+70 Changed to Channel Restoration Sta. 133+70 to 134+25	RBC

APPROVED: *Richard B. Ulp*
PROFESSIONAL ENGINEER

APPROVED: *Robert A. Pannini*
CHIEF, DIVISION OF MINE RECLAMATION

APPROVED: *John M. ...*
DIRECTOR - BUREAU OF DESIGN



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
OFFICE OF RESOURCES MANAGEMENT

PROJECT NO. SL 113-5-1

MINE DRAINAGE POLLUTION ABATEMENT
COAL RUN
SHAMOKIN CREEK WATERSHED
NORTHUMBERLAND COUNTY, PA.

ERDMAN, ANTHONY, ASSOCIATES
Consulting Engineers
Camp Hill, Pa. Rochester, N.Y.

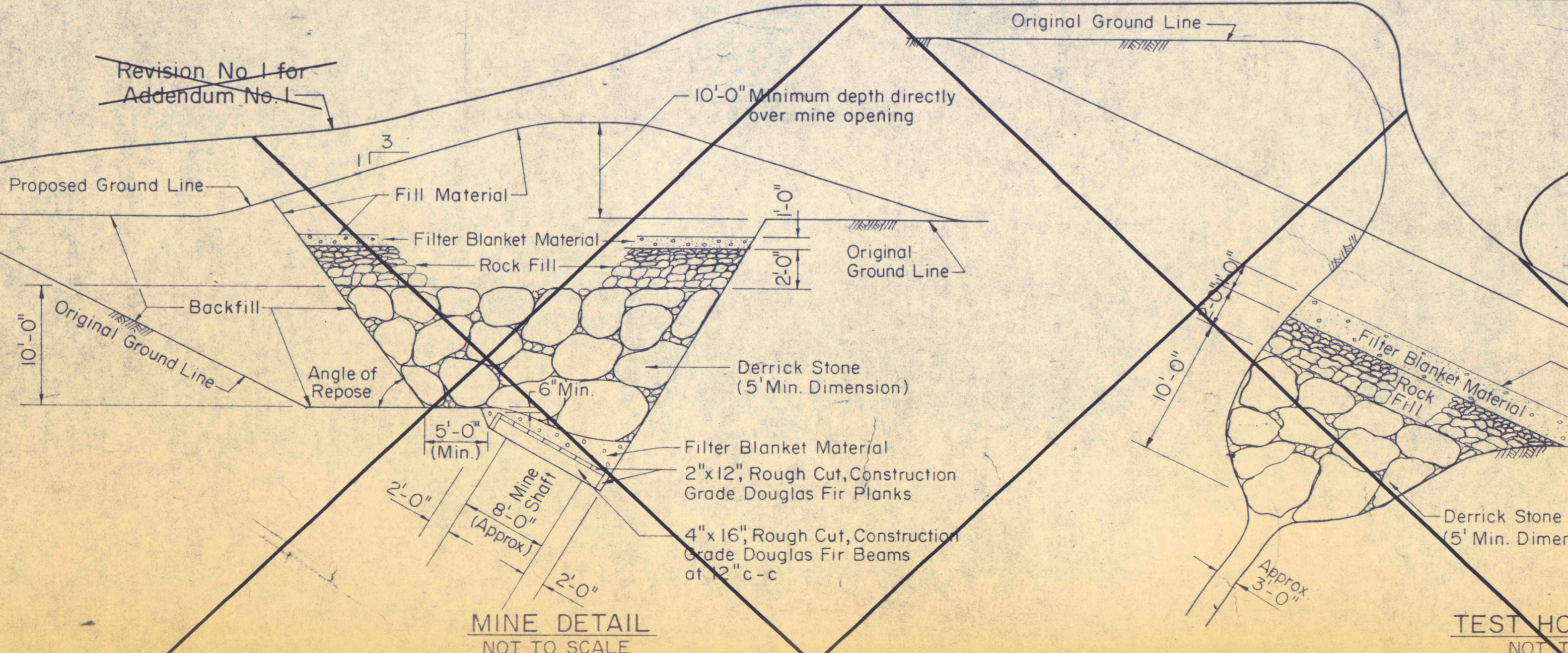
PLAN

DRAWN BY	DATE	DRAWING NO.
GMS	5-9-75	11 of 28
CHECKED BY	SCALE	
DHC	1" = 100'	

CURVE 2	CURVE 3	CURVE 4
PC. Sta. 133+60 C	PC. Sta. 135+61 C	PC. Sta. 141+09 C
PT. Sta. 135+60 C	PT. Sta. 138+63 C	PT. Sta. 144+11 C
T = 100.1'	T = 151.5'	T = 150.8'
Δ = 5°30'	Δ = 16°	Δ = 12°
R = 2083.7'	R = 1075.4'	R = 1432.7'

CURVE C-1	CURVE C-2	CURVE C-1
PC. Sta. C-0+55 C, 148' Lt. Sta. 0+18 R	PC. Sta. C-10+05 C	PC. Sta. C-0+55 C, 148' Lt. Sta. 0+18 R
PT. Sta. C-5+55 C, 147' Lt. Sta. 6+20 R	PT. Sta. C-11+58 C	PT. Sta. C-2+20 C, 118' Lt. Sta. 1+76 R
T = 157'	T = 75'	T = 69.4'
Δ = 42°	Δ = 12°	Δ = 19°16'
R = 409'	R = 716'	R = 409'

CURVE C-1A	CURVE C-2
PC. Sta. C-3+40 C, 119' Lt. Sta. 2+96 R	PC. Sta. 9+14 C
PT. Sta. C-9+14 C	PT. Sta. 11+92 C
T = 335.54'	T = 143.77'
Δ = 74°24'	Δ = 36°02'
R = 442'	R = 442'



MINE DETAIL
NOT TO SCALE

TEST HOLE DETAIL
NOT TO SCALE