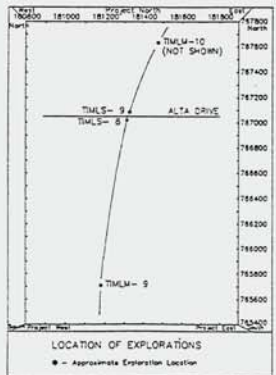
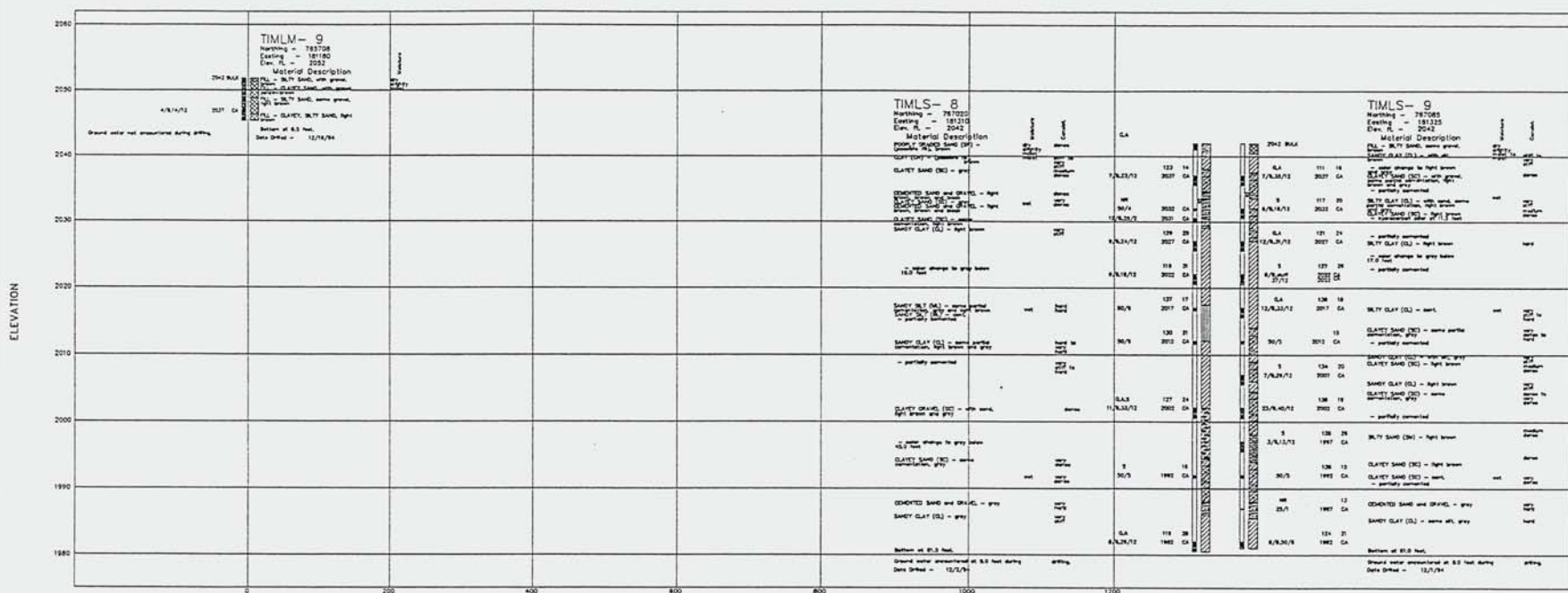


FENCE DIAGRAM

FED. NO. / REG. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
9	NEVADA	DPC-009(002)	CLARK	B-115A



BEST FIT DISTANCE FROM FIRST BORING (ft.)

THESE BORING LOGS AND TEST SUMMARIES APPLY ONLY AT THE LOCATIONS DRILLED AND AT THE TIME OF EXPLORATION. CONDITIONS MAY DIFFER AT OTHER LOCATIONS AND MAY CHANGE AT THESE LOCATIONS WITH TIME. DATA IS A SIMPLIFICATION. SEE SHEET B-115B FOR FENCE DIAGRAM LEGEND.



ORIGINAL CONSTRUCTION CONTRACT NO 1309, 1881

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
ALTA DRIVE
GRADE SEPARATION
LOG of BORINGS

H-935

 Geotechnical and Environmental Engineers Soil and Material Testing PROJECT No. 31-215903	DESIGNED BY: MEV DRAWN BY: AJR CHECKED BY: MEV REVIEWED BY: AEM
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B-115A.DWG. 8/75

FENCE DIAGRAM

FED. NO. REC. NO.	STATE	PROJECT NO.	COUNTY	SHEET NO.
9	NEVADA	DPC-009(002)	CLARK	B-1150

K.A. PENETRATION CLASSIFICATION - A

COARSE GRAINED SOIL		FINE GRAINED SOIL	
BLOWS/FT.*	DENSITY	BLOWS/FT.*	CONSISTENCY
0 - 5	VERY LOOSE	0 - 1	VERY SOFT
6 - 12	LOOSE	2 - 3	SOFT
13 - 36	MEDIUM DENSE	4 - 7	MEDIUM STIFF
37 - 60	DENSE	8 - 13	STIFF
OVER 60	VERY DENSE	14 - 25	VERY STIFF
* Penetration Test N=350 lb. Hammer, with a 30" free fall on a 3.25" O.D., 2.6" I.D. Sampler.		26 - 42	HARD
		OVER 42	VERY HARD

STANDARD PENETRATION CLASSIFICATION - B

COARSE GRAINED SOIL		FINE GRAINED SOIL	
BLOWS/FT.*	DENSITY	BLOWS/FT.*	CONSISTENCY
0 - 4	VERY LOOSE	0 - 2	VERY SOFT
5 - 10	LOOSE	3 - 4	SOFT
11 - 30	MEDIUM DENSE	5 - 8	MEDIUM STIFF
31 - 50	DENSE	9 - 15	STIFF
OVER 50	VERY DENSE	16 - 30	VERY STIFF
* Penetration Test N=140 lb. Hammer, with a 30" free fall on a 2.0" O.D., 1.38" I.D. Sampler.		31 - 50	HARD
		OVER 50	VERY HARD

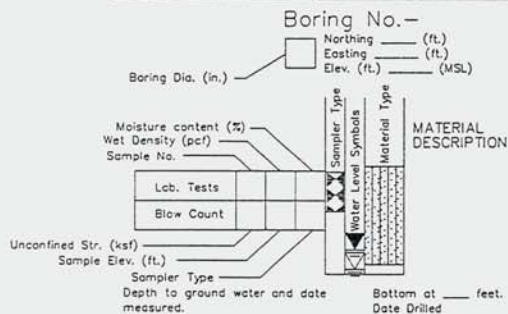
MOD. CA. PENETRATION CLASSIFICATION - C

COARSE GRAINED SOIL		FINE GRAINED SOIL	
BLOWS/FT.*	DENSITY	BLOWS/FT.	CONSISTENCY
0 - 6	VERY LOOSE	0 - 2	VERY SOFT
7 - 16	LOOSE	3 - 5	SOFT
17 - 47	MEDIUM DENSE	6 - 10	MEDIUM STIFF
48 - 78	DENSE	11 - 18	STIFF
OVER 78	VERY DENSE	19 - 36	VERY STIFF
* Penetration test N=140 lb. hammer, with a 30" free fall on a 2.5" O.D., 1.9" I.D. Sampler.		37 - 60	HARD
		OVER 60	VERY HARD

UNIFIED SOIL CLASSIFICATION

MAJOR DIVISIONS		TYPICAL NAME and DESCRIPTION	
COARSE GRAINED SOIL	GRAVEL <small>More than 50% of the coarse fraction coarser than the # 4 sieve.</small>	GW - WELL GRADED GRAVELS, Gravel-Sand mixtures, little or no fines. GP - POORLY GRADED GRAVELS, gravel-sand mixtures, little or no fines. GM - SILTY GRAVELS, poorly graded gravel-sand-silt mixtures. GC - CLAYEY GRAVELS, poorly graded gravel-sand-clay mixtures.	
	SAND <small>More than 50% of the coarse fraction finer than the # 4 sieve.</small>	SW - WELL GRADED SANDS, gravelly-sand with little or no fines. SP - POORLY GRADED SANDS, gravelly-sand with little or no fines. SM - SILTY SANDS, poorly graded gravel-sand-silt mixtures. SC - CLAYEY SANDS, poorly graded sand-gravel-clay mixtures.	
	FINE GRAINED SOIL	LOW PLASTIC SILTS & CLAYS <small>Plastic Limit below the A - Line Plastic Limit above the A - Line Liquid limit LESS than 50</small>	ML - Inorganic SILTS & very fine SANDS, silty or clayey very fine sands, clayey silts with low plasticity. CL - Inorganic LEAN CLAYS of low to medium plasticity, GRAVELLY CLAYS, SANDY CLAY, SILTY CLAY. OL - Organic SILTS & CLAYS of low plasticity
		HIGH PLASTIC SILTS & CLAYS <small>Plastic limit below the A-Line. Plastic limit above the A-Line. Liquid limit GREATER than 50</small>	MH - Inorganic SILTS, micaceous or diatomaceous fine sand or silt. CH - Inorganic CLAY of high plasticity, fat clay OH - Organic SILTS and CLAYS of medium to high plasticity.
		HIGHLY ORGANIC SOILS	Pt - Peat, Humus, Swamp soil with high organics

Boundary classifications: Utilize dual symbols.



- KEY:**
- CALICHE
 - cemented SAND & GRAVEL

- BLOW COUNT - CONSISTENCY CORRELATION**
By Terzaghi and others, correlation often poor do to many poorly controlled variables.
- Groundwater level encountered during drilling (May not be static level)
 - Groundwater level measured on date shown.

- LABORATORY TESTS:**
NR=No Recovery, C=Consolidation, A=Atterberg, Ch=Chemical test, S=Direct Shear, G=Grain-Size, E=Expansion, Sol=Solubility, Res=Resistivity, R=R-Value, PP=Pocket Penetrometer

- SAMPLER TYPE:**
 Drive Sample 2.63" I.D.
 Shelby Sample 1.93" I.D.
 Bulk Sample 1.38" I.D.
 Ca. S.S. Sample
 SPT Sample

ORIGINAL CONSTRUCTION CONTRACT NO 1309:1881

STATE OF NEVADA
DEPARTMENT OF TRANSPORTATION
ALTA DRIVE
GRADE SEPARATION
FENCE DIAGRAM LEGEND
H-935

KLEINFELDER
Geotechnical and Environmental Engineers
Soils and Material Testing

DESIGNED BY: ASJ
DRAWN BY: ASJ
CHECKED BY: WEV
REVIEWED BY: JEM

PROJECT No. 31-215903



B-1150 DWS 6/93