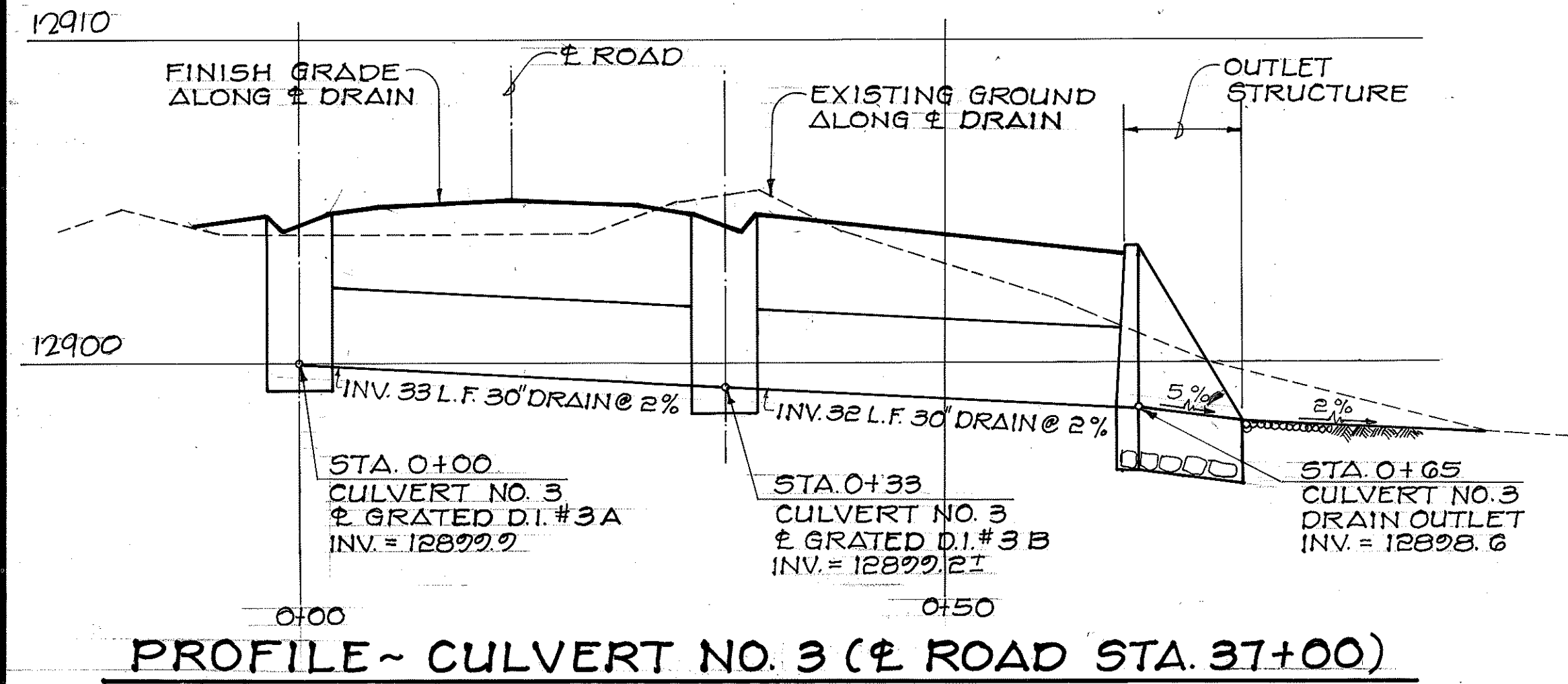
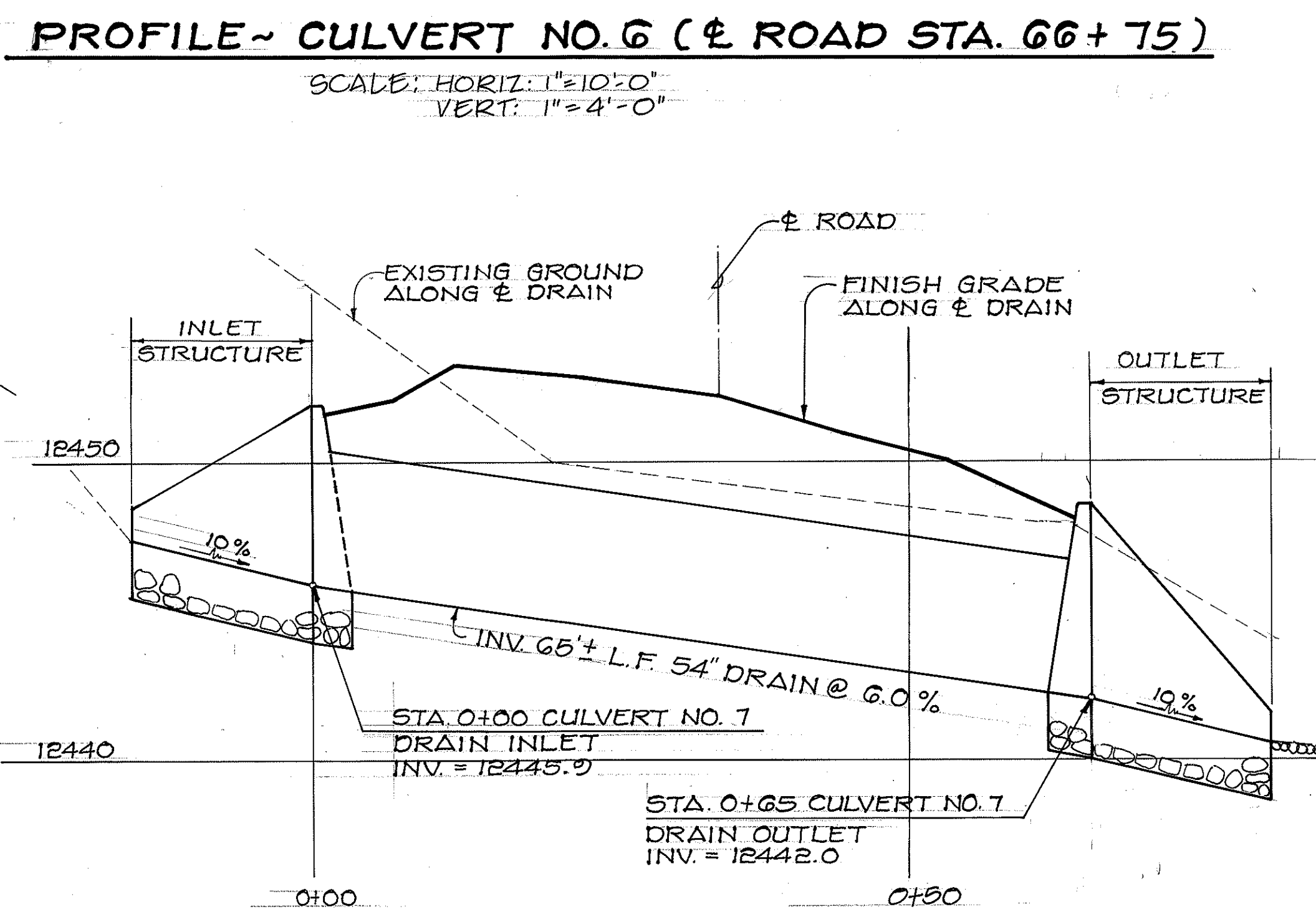
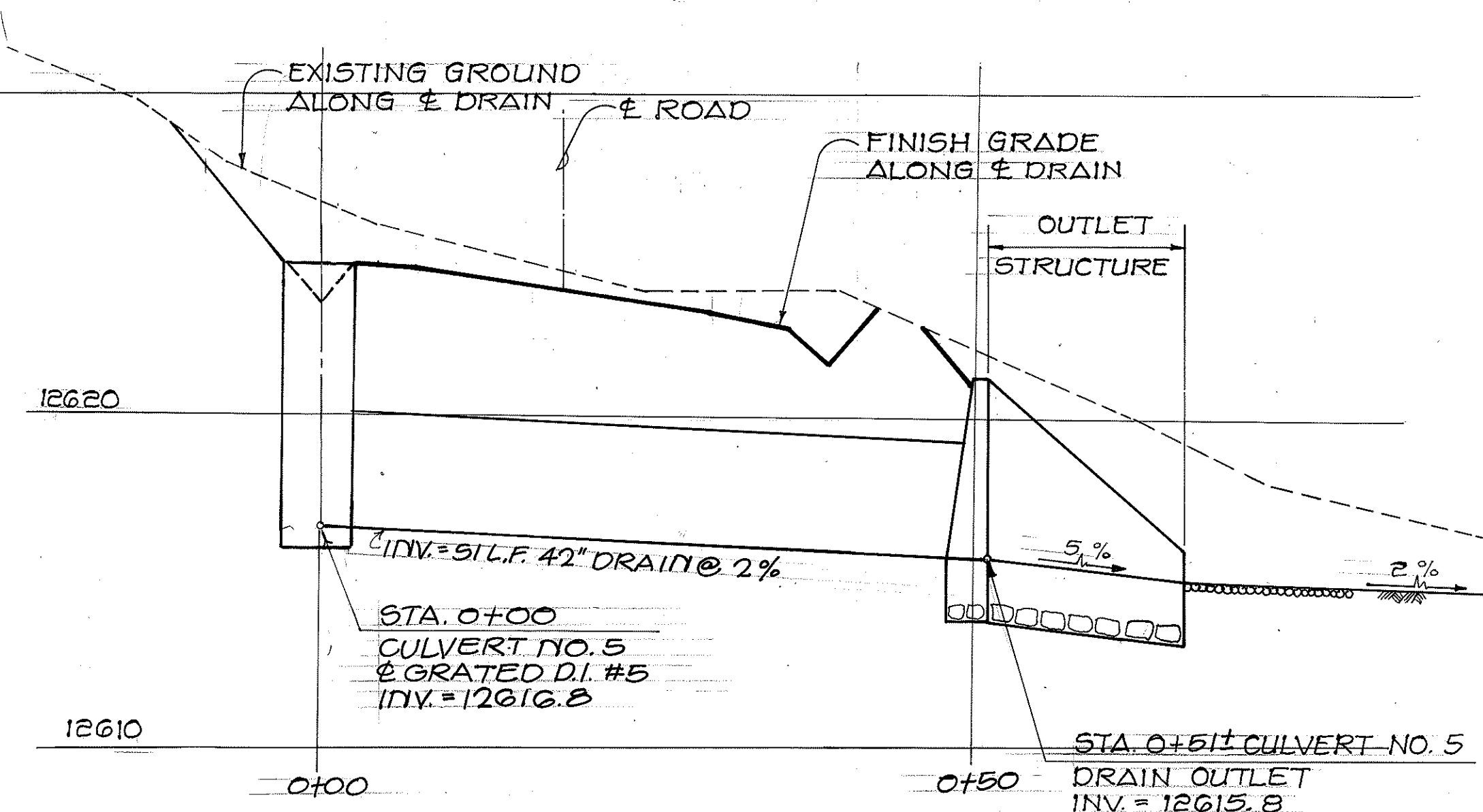
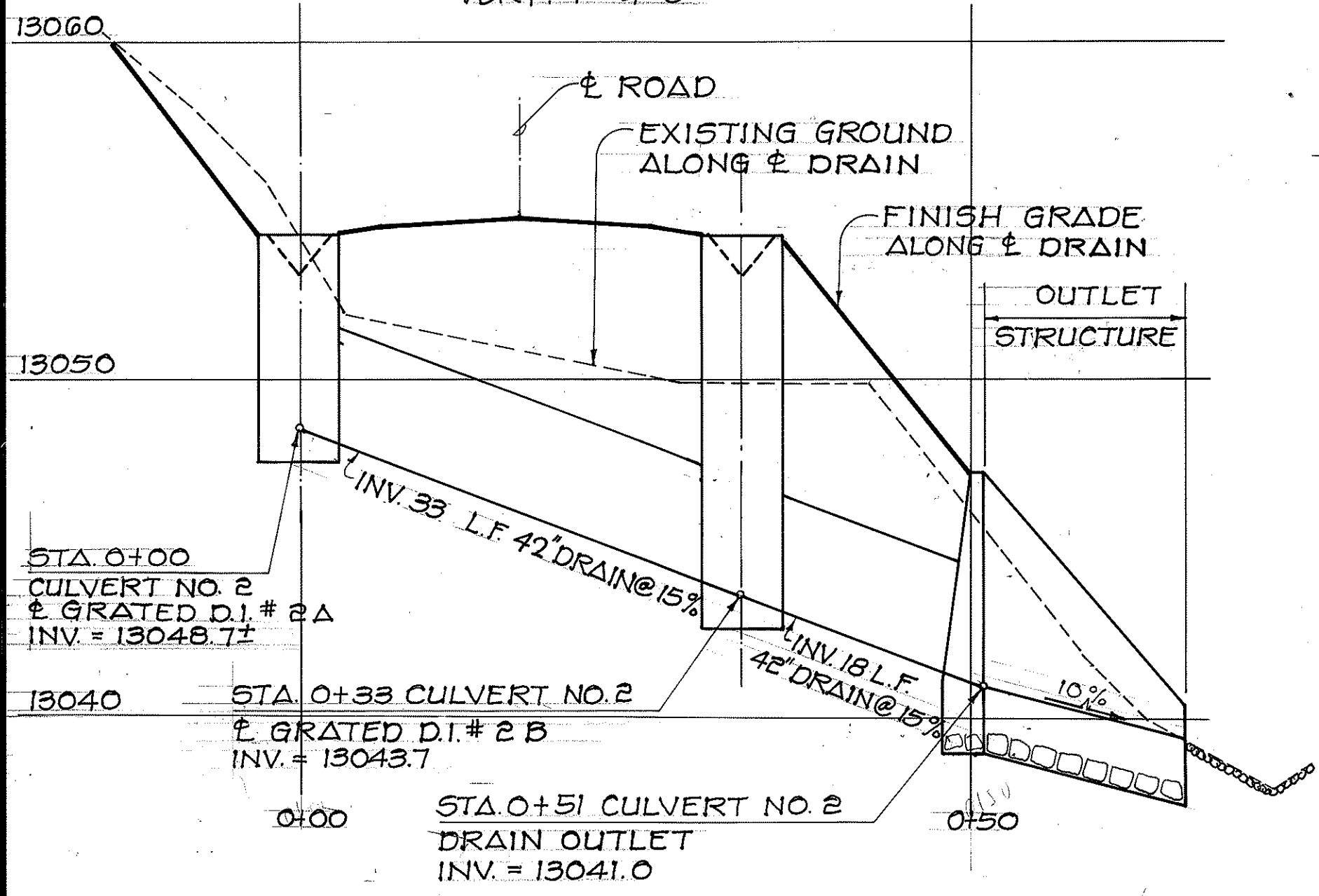
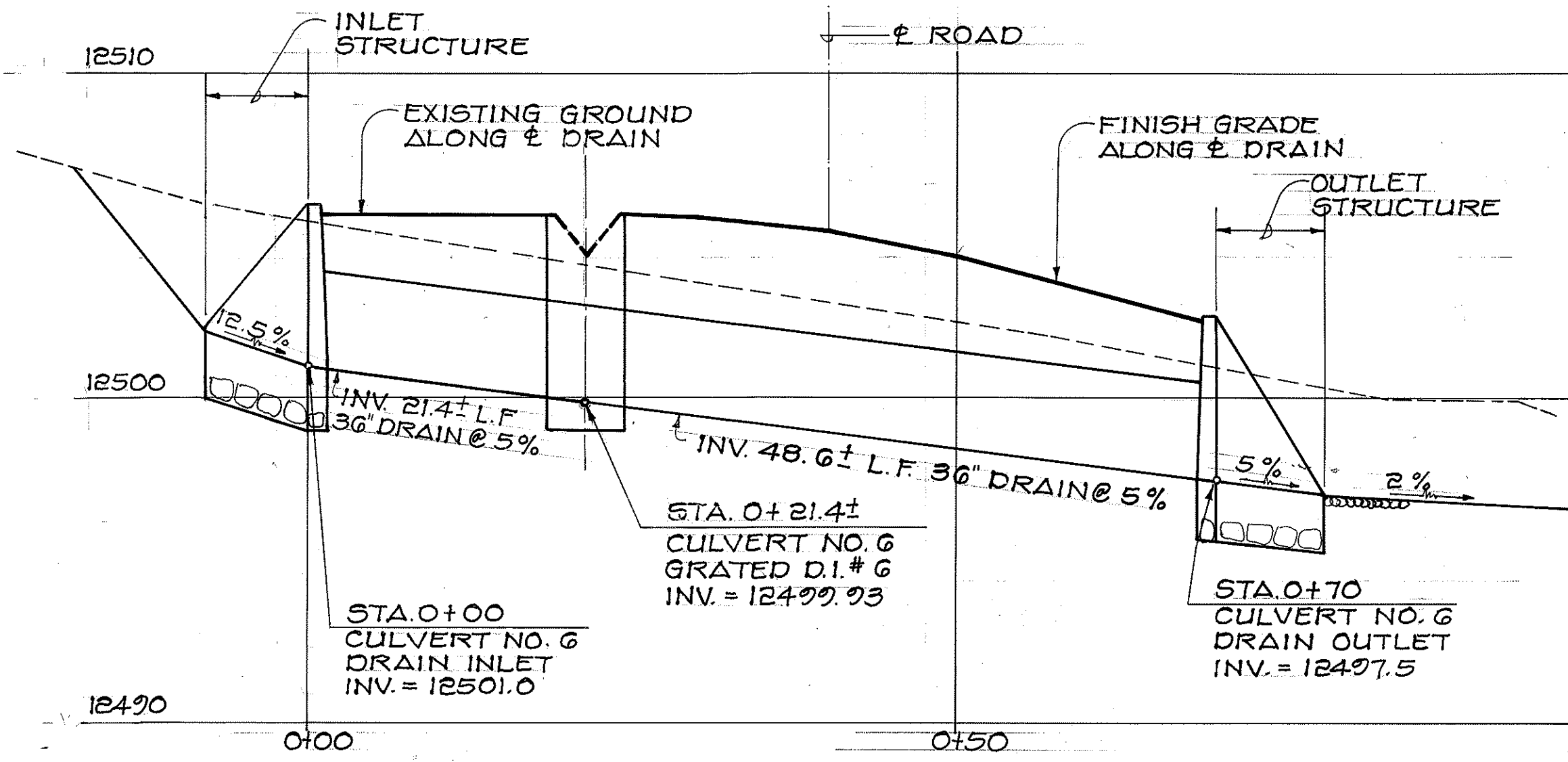
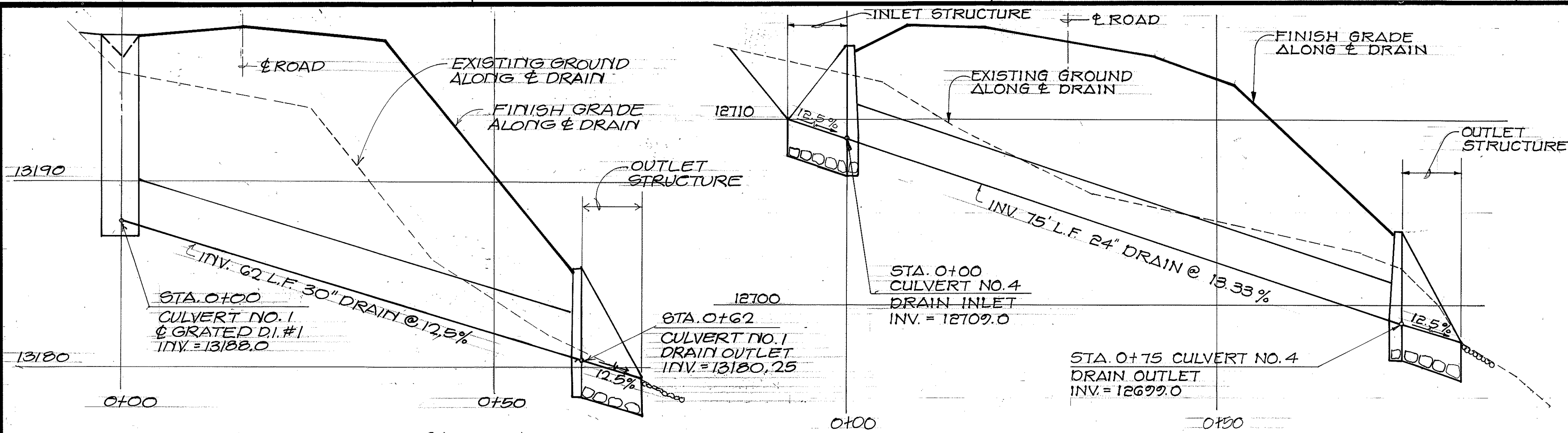


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-86	1987	90	115



HYDRAULIC DATA				
CULVERT NO.	SIZE (IN.)		dn (FT)	V (FPS)
1	30	17.7	0.82	13.5
2	42	66.8	1.35	20.0
3	30	21.7	1.53	6.9
4	24	10.4	0.66	11.6
5	42	45.4	1.93	8.3
6	36	33.2	1.34	10.9
7	54	86.7	1.78	14.7

ROYCE S. FUKUNAGA
REGISTERED PROFESSIONAL ENGINEER
No. 2107-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CULVERT PROFILES

MAUNA KEA OBSERVATORY ACCESS ROAD
PHASE II-A

PROJECT NO. HWY-H-01-86

SCALE: HORIZ. 1"=10'-0" VERT. 1"=4'-0"

SHEET NO. 1 OF 1 SHEETS

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Royce S. Fukunaga
FUKUNAGA & ASSOCIATES

DATE: _____

SURVEY PLOTTED BY: _____

DRAWN BY: _____

DESIGNED BY: _____

QUANTITIES BY: _____

CHECKED BY: _____

ORIGINAL PLAN: _____

NOTE BOOK: _____

NO. _____