

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	460A-01-02	2003	6	12

NOTE:

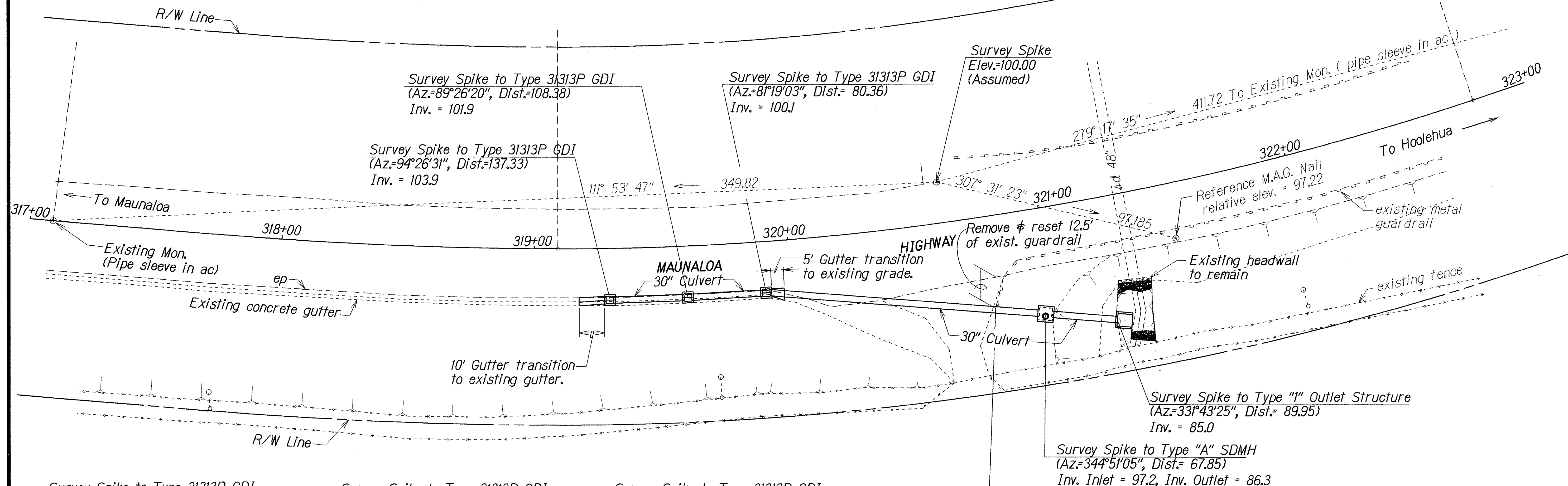
The locations of the proposed Grated Drop Inlets and Gutter shown on the Plan is based on the Survey Spike (Assumed Elevation=100.00) located on the outbound shoulder of Maunaloa Highway. The distance and azimuth shown on the Plan is from the Survey Spike to approximately the centerline Inlet and Gutter.

Survey Spike to Type "A" SDMH
(Az=344°51'05", Dist.=67.85)
Remove & reset: Exist. guardrail
Construct: Type "A" SDMH
Type "G" Mod. End Terminal
(For details see Sht. No. H7.)
Install: 30" Culvert

Estimated Quantities
Structure Excavation = 142 CY
Bed Course Material = 24 CY
30" Culvert = 107 LF
Type "A" SDMH = 1 Ea
Type "G" Mod. End Terminal = 1 Ea

Survey Spike to Type "I" Outlet Structure
(Az=33°43'25", Dist.=89.95)
Construct: Type "I" Outlet Structure
(For details see Sht. Nos. H5 & H6.)
Hand-Laid Riprap Structure
(For details see Sht. Nos. H5 & H6.)
Install: 30" Culvert

Estimated Quantities
Structure Excavation = 32 CY
Bed Course Material = 5 CY
30" Culvert = 25 LF
Type "I" Outlet Structure = 1 Ea
Hand-Laid Riprap = 18 CY



Survey Spike to Type 31313P GDI
(Az=94°26'31", Dist.=137.33)
Construct: Type 31313P GDI
(For details see Sht. No. H3.)
Gutter, Type 2(31313)
(For details see Sht. No. H3.)
Install: 30" Culvert

Estimated Quantities
Type 31313P GDI = 1 Ea
Gutter, Type 2(31313) = 28 LF

Survey Spike to Type 31313P GDI
(Az=89°26'20", Dist.=108.38)
Construct: Type 31313P GDI
Gutter, Type 2(31313)
Install: 30" Culvert

Estimated Quantities
Structure Excavation = 33 CY
Bed Course Material = 6 CY
30" Culvert = 28 LF
Type 31313P GDI = 1 Ea
Gutter, Type 2(31313) = 28 LF

Survey Spike to Type 31313P GDI
(Az=81°19'03", Dist.=80.36)
Construct: Type 31313P GDI
Gutter, Type 2(31313)
Install: 30" Culvert

Estimated Quantities
Structure Excavation = 33 CY
Bed Course Material = 6 CY
30" Culvert = 28 LF
Type 31313P GDI = 1 Ea
Gutter, Type 2(31313) = 28 LF

Remove exist. end terminal,
Construct New Type "G" Mod.
End Terminal

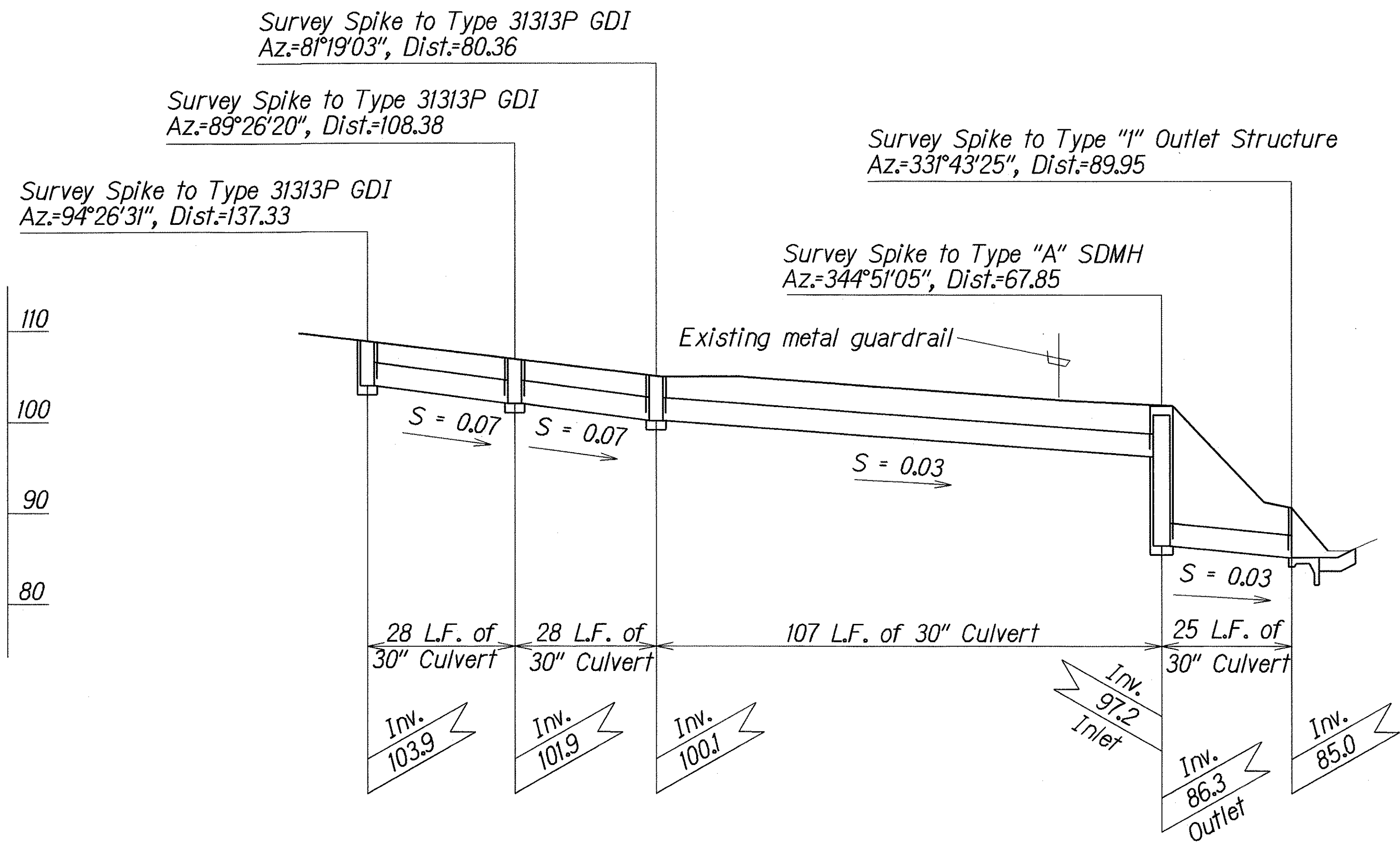
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN
MAUNALOA HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Hoolehua
Project No. 460A-01-02

Scale: 1"=20'
Date: June, 2002

SHEET No. **HI** OF **7** SHEETS

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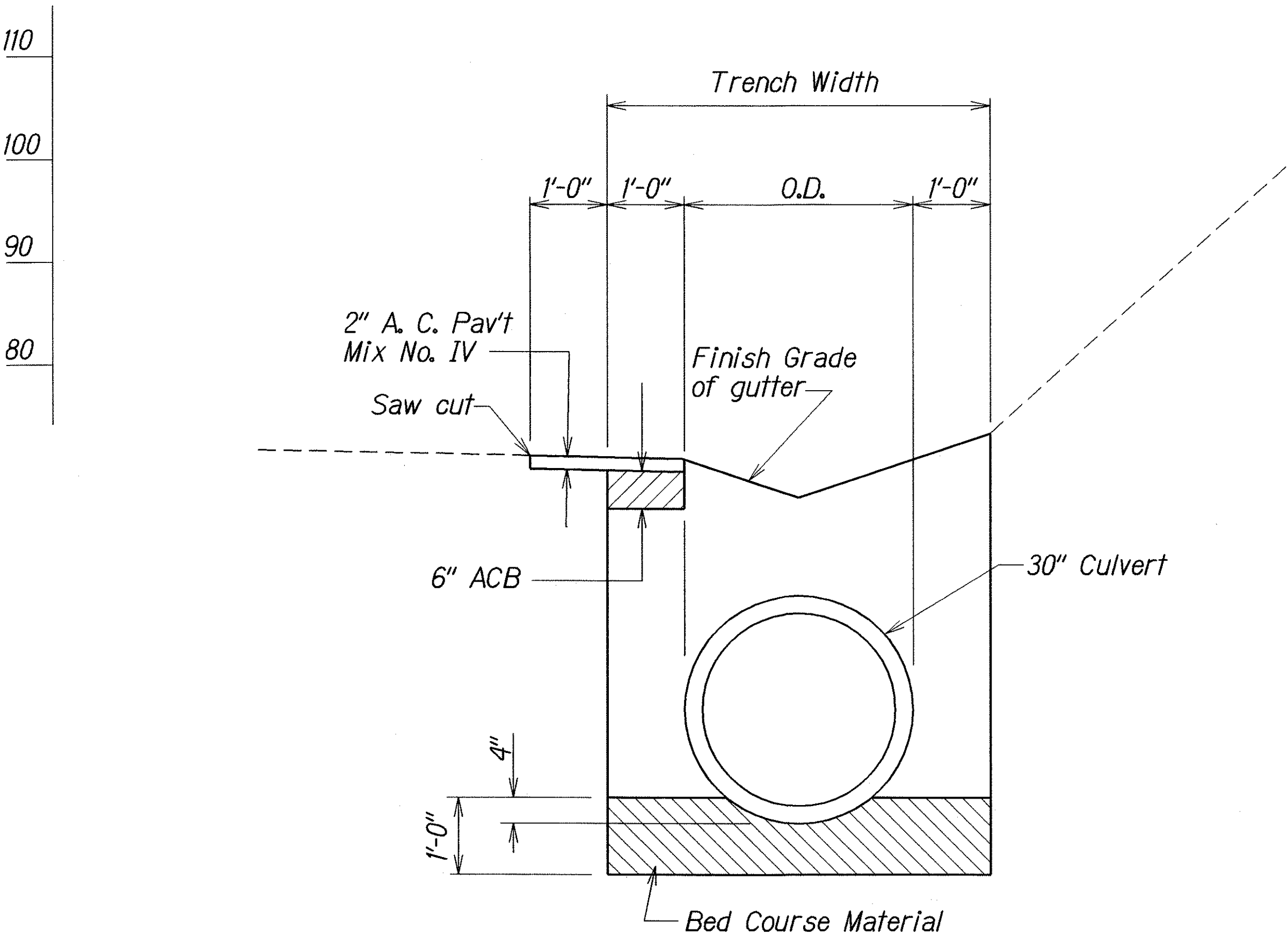


CL PROFILE ALONG 30" CULVERT

Scale: Horiz. 1"=20'
Vert. 1"=10'

NOTE:

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DETAIL OF TRENCH RESTORATION

Scale: 3/4"= 1'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
MAUNALOA	TRACED BY	
DESIGN	QUANTITIES BY	
CHECKED BY		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PROFILE & DETAIL
MAUNALOA HIGHWAY
DRAINAGE IMPROVEMENTS
Vicinity of Hoolehua
Project No. 460A-01-02
Scale: As Shown Date: June, 2002

SHEET No. H2 OF 7 SHEETS