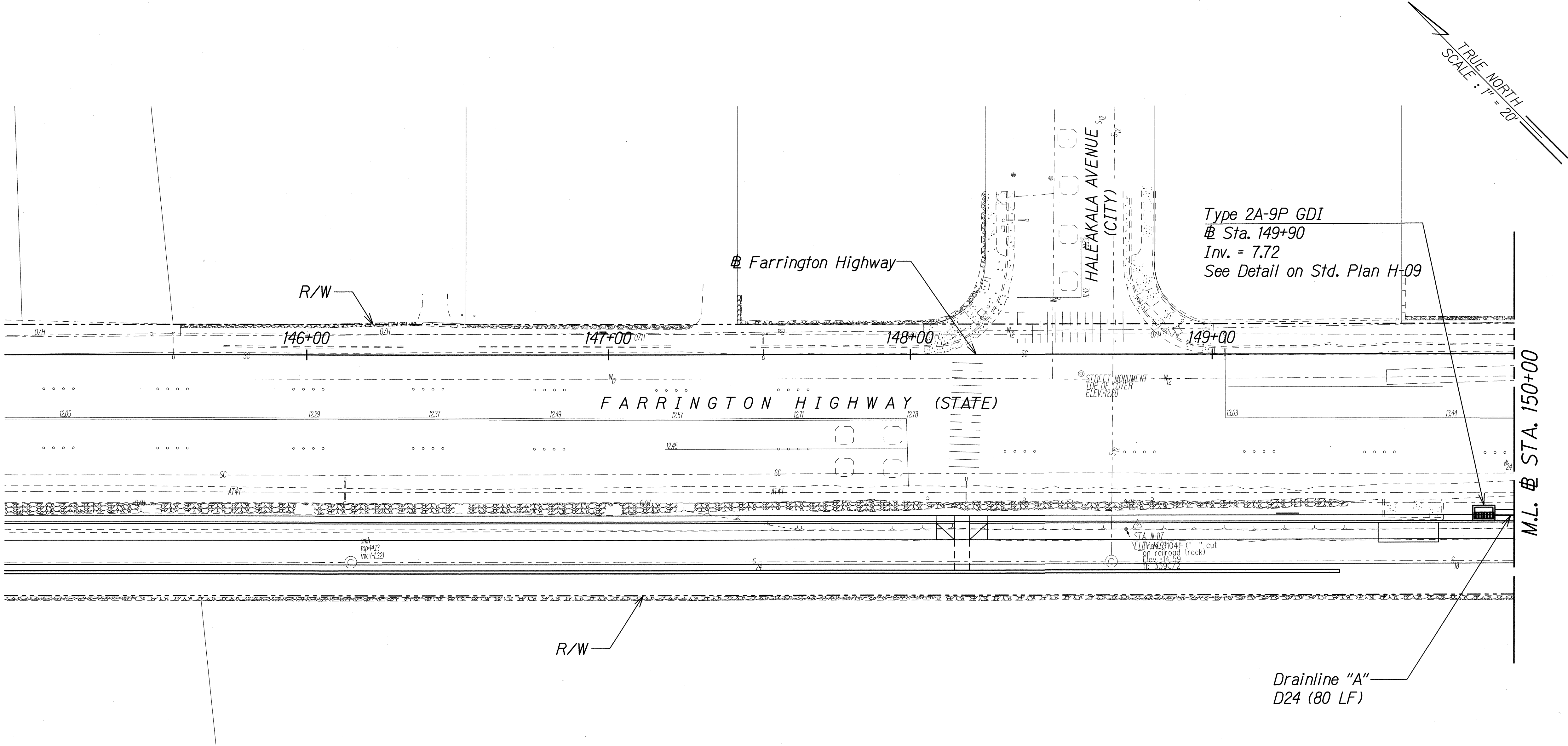


FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	59	230



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	

T:\DOT-FARRINGTON HWY INTERSECTIONS NANAKULI HALEAKALA\CADD\Sheets\Drainage\DRN_02.dgn

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Gerald D. Andrade
SIGNATURE

04/30/14
EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

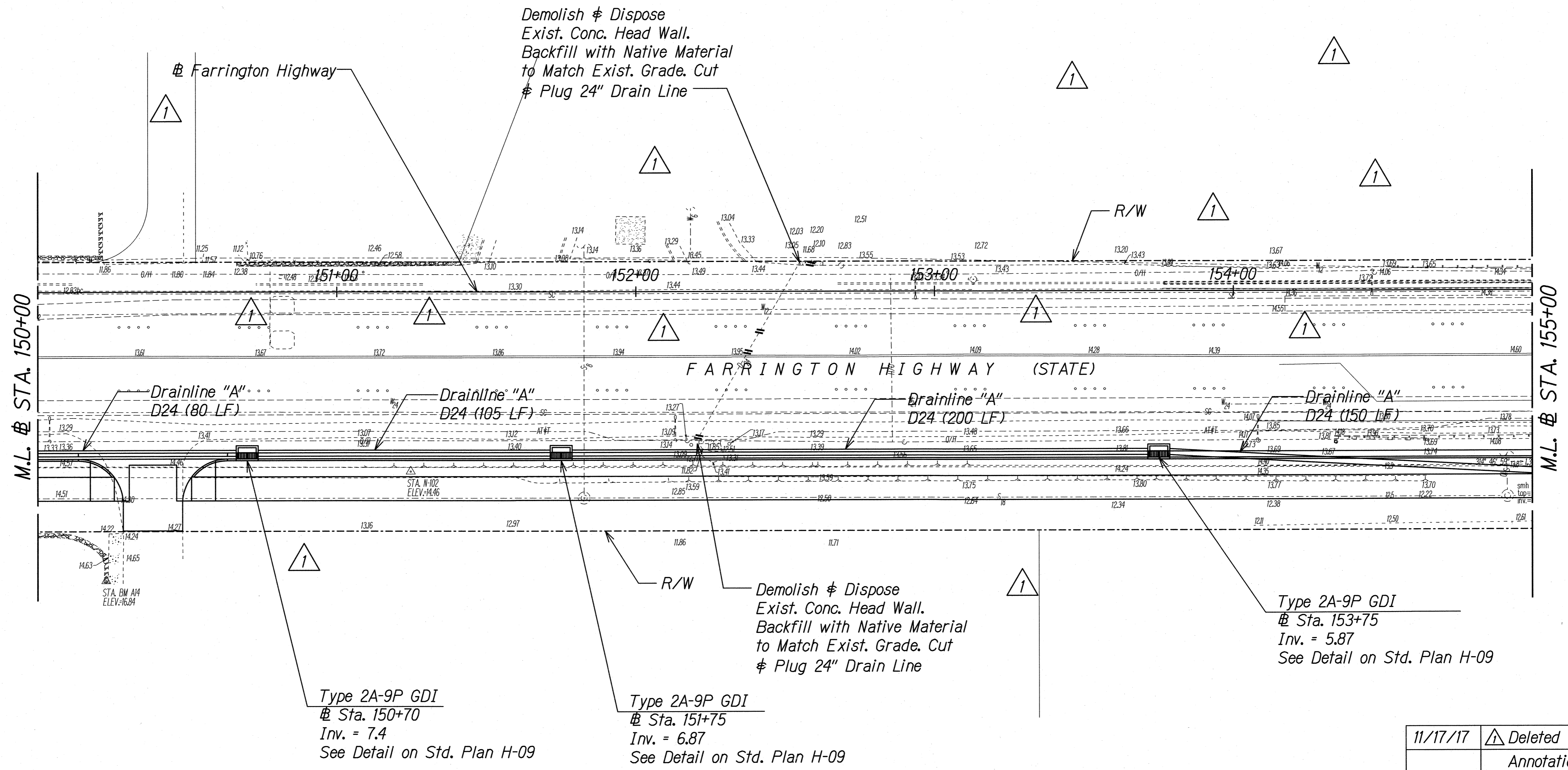
DRAINAGE PLAN
STA. 145+00 TO 150+00

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NANAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)

Scale: 1"=20' Date: April 2013

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 60	230

TRUE NORTH
SCALE: 1" = 20'



11/17/17	Deleted Drainline and Annotations
Date	Revision

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 Signature: *Gerald D. Andrade*
 EXPIRATION DATE OF THE LICENSE: 04/30/18

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DRAINAGE PLAN
STA. 150+00 TO 155+00

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
 AT NAKAKULI AVENUE AND HALEAKALA AVENUE
 Federal-Aid Project No. STP-093-1(22)

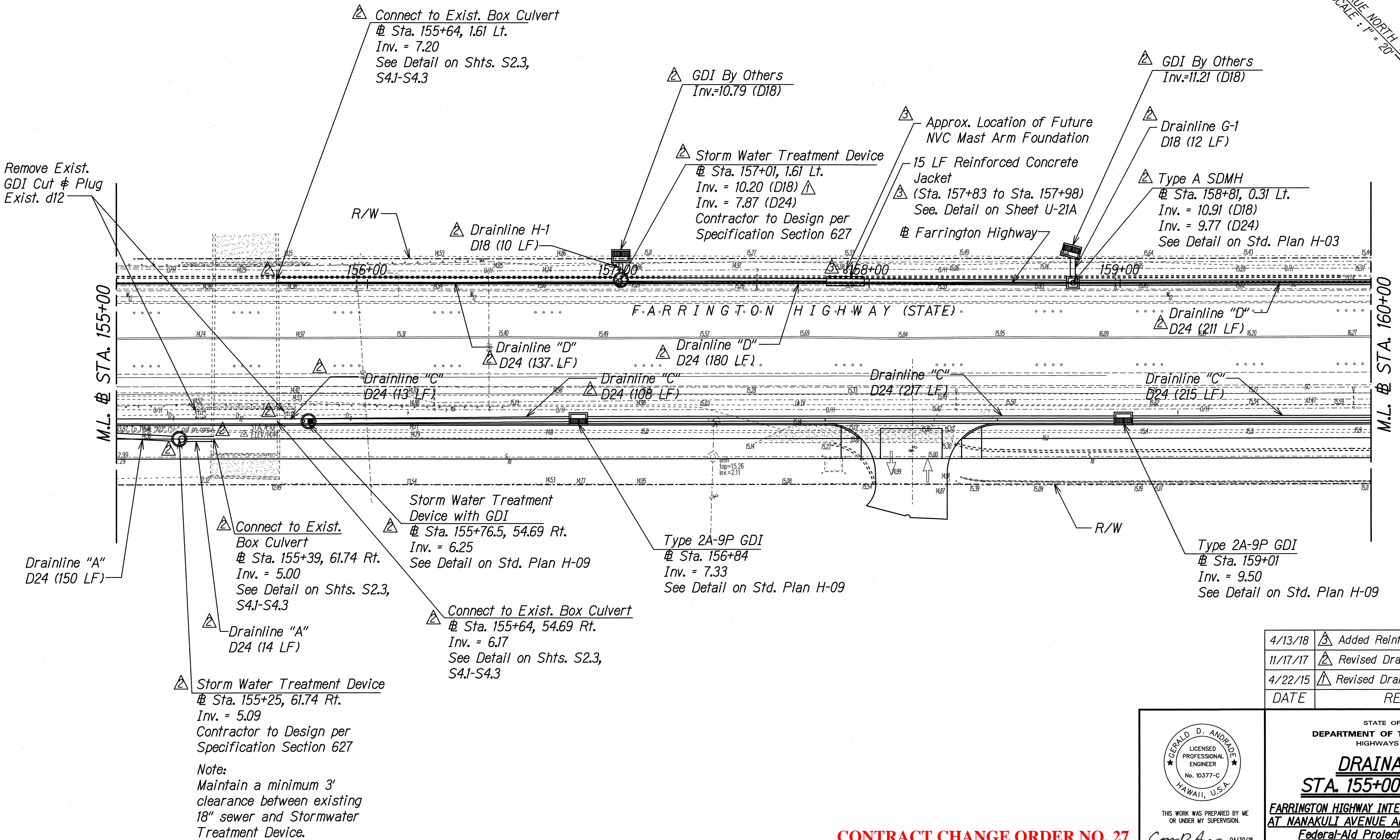
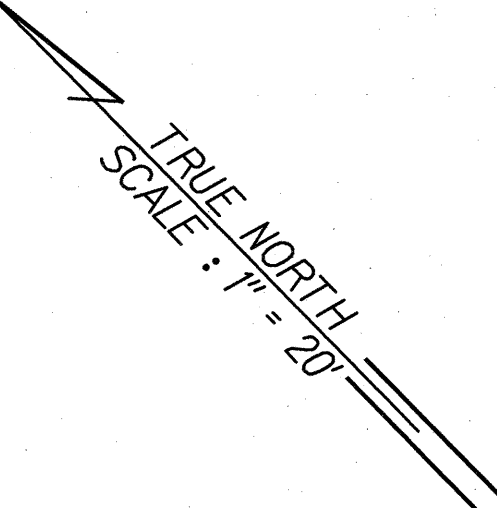
Scale: 1"=20' Date: April 2013

CONTRACT CHANGE ORDER NO. 27
Attachment 1

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

T:\DOT-FARRINGTON HWY INTERSECTIONS\NAKAKULI HALEAKALA\CADD\Sheets\Drainage\drn_03.dgn

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 61	230



DATE	BY
DESIGNED BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
DESIGNED BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	

T:\DOT-FARRINGTON HWY INTERSECTIONS\NANAKULI HALEAKALA\CADD\ChangeOrder COI\drn-04-WC.dgn

CONTRACT CHANGE ORDER NO. 27
Attachment 1

DATE	REVISION
4/13/18	Added Reinforced Concrete Jacket
11/17/17	Revised Drainline "D"
4/22/15	Revised Drainline "D"

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Gerald D. Andrade* Date: 04/30/18

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

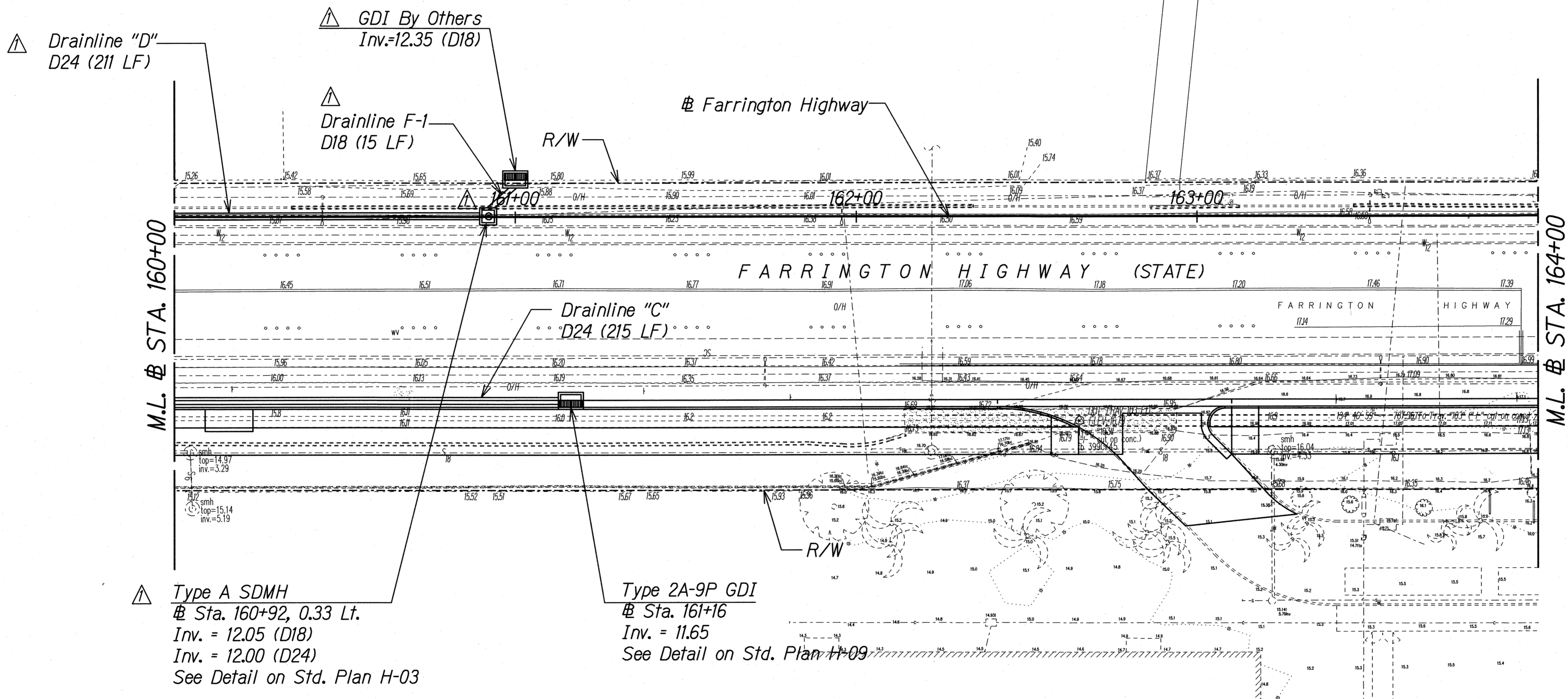
DRAINAGE PLAN
STA. 155+00 TO 160+00

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NANAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)

Scale: 1"=20' Date: April 2013

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 62	230

TRUE NORTH
SCALE: 1" = 20'



△ Type A SDMH
@ Sta. 160+92, 0.33 Lt.
Inv. = 12.05 (D18)
Inv. = 12.00 (D24)
See Detail on Std. Plan H-03

Type 2A-9P GDI
@ Sta. 161+16
Inv. = 11.65
See Detail on Std. Plan H-03

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

CONTRACT CHANGE ORDER NO. 27
Attachment 1

11/17/17	△ Revised Drainline "D"
DATE	REVISION

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Gerald D. Andrade* Date: 04/30/18

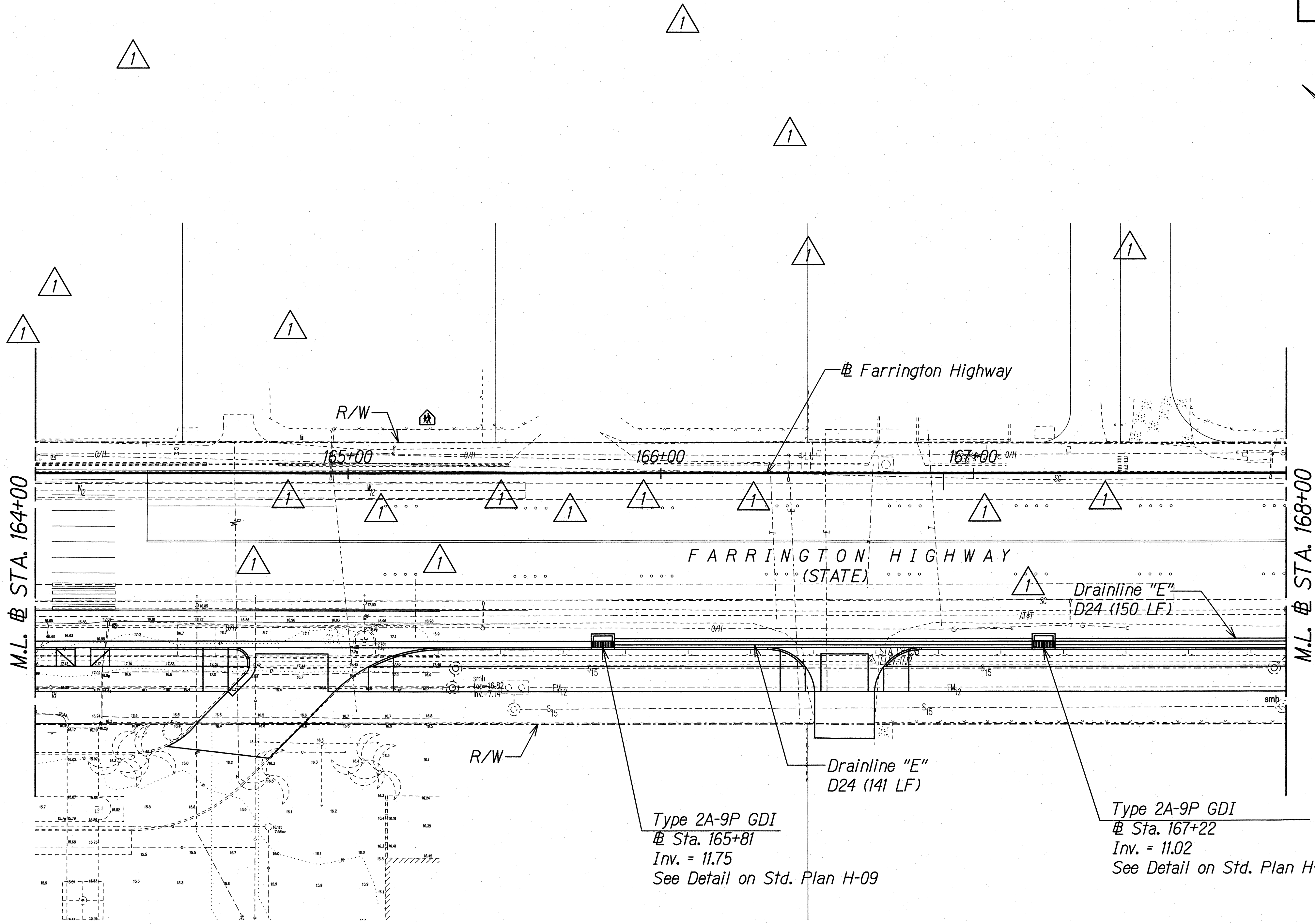
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN
STA. 160+00 TO 164+00

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NANAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)

Scale: 1"=20' Date: April 2013

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 63	230



ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
DESIGNED BY	
NOTED BY	
CHECKED BY	

T:\DOT-FARRINGTON HWY INTERSECTIONS\NANAKULI\HALEAKALA\CADD\Sheets\drainage\drn_06.dgn

CONTRACT CHANGE ORDER NO. 27
Attachment 1

11/17/17	Deleted Drainline and Annotations
Date	Revision

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Gerald D. Andrade
SIGNATURE

04/30/18
EXPIRATION DATE OF THE LICENSE

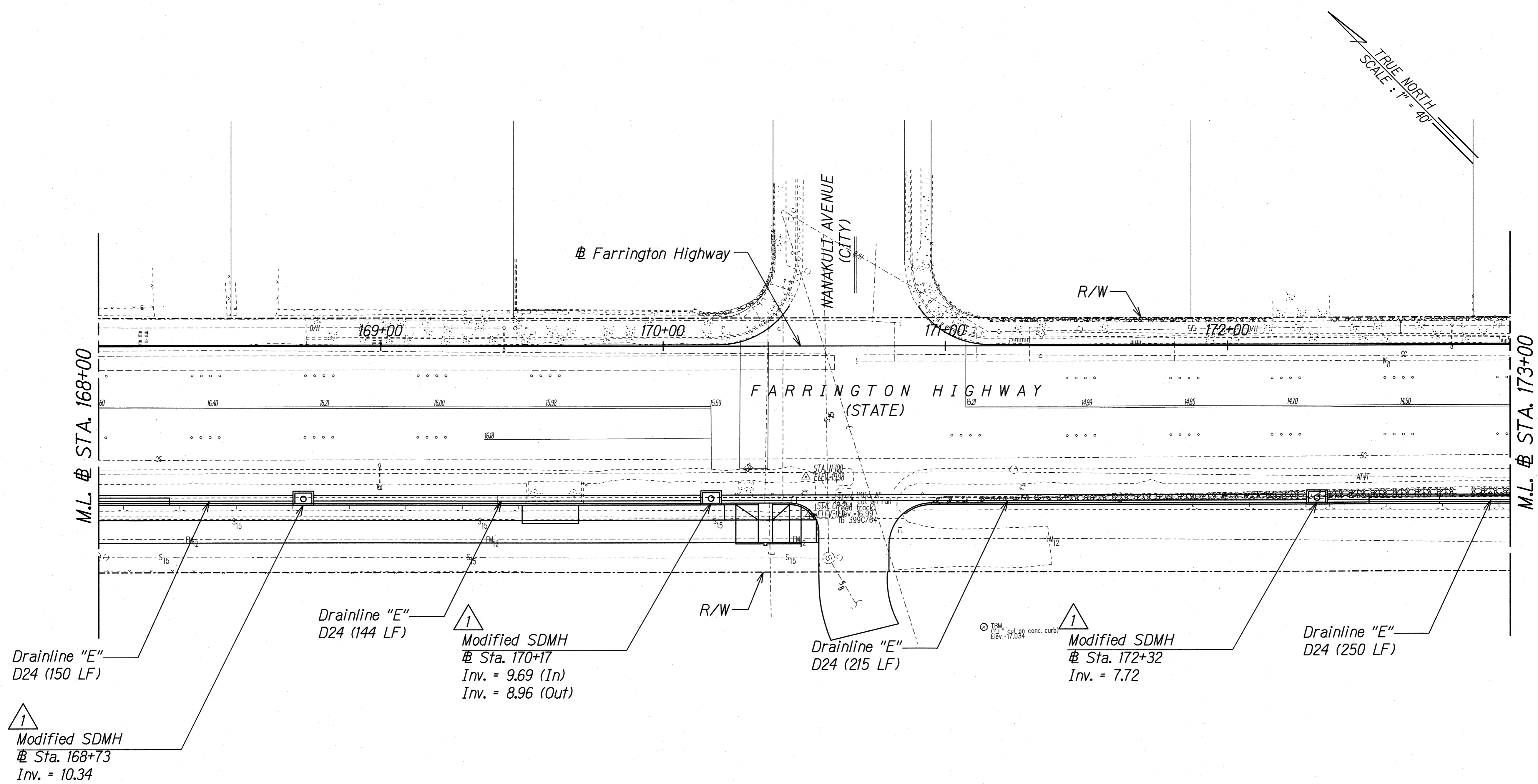
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN
STA. 164+00 TO 168+00

**FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NANAKULI AVENUE AND HALEAKALA AVENUE**
Federal-Aid Project No. STP-093-1(22)

Scale: 1"=20' Date: April 2013

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 64	230



ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
NOTES BOOK	
QUANTITIES BY	
CHECKED BY	

T:\DOT-FARRINGTON HWY INTERSECTIONS\NAWAKULI HALEAKALA\CADD\Sheets\drainage\drn_07.dgn

CONTRACT CHANGE ORDER NO. 27
Attachment 1

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Gerald D. Andrade*
Date: 04/30/18

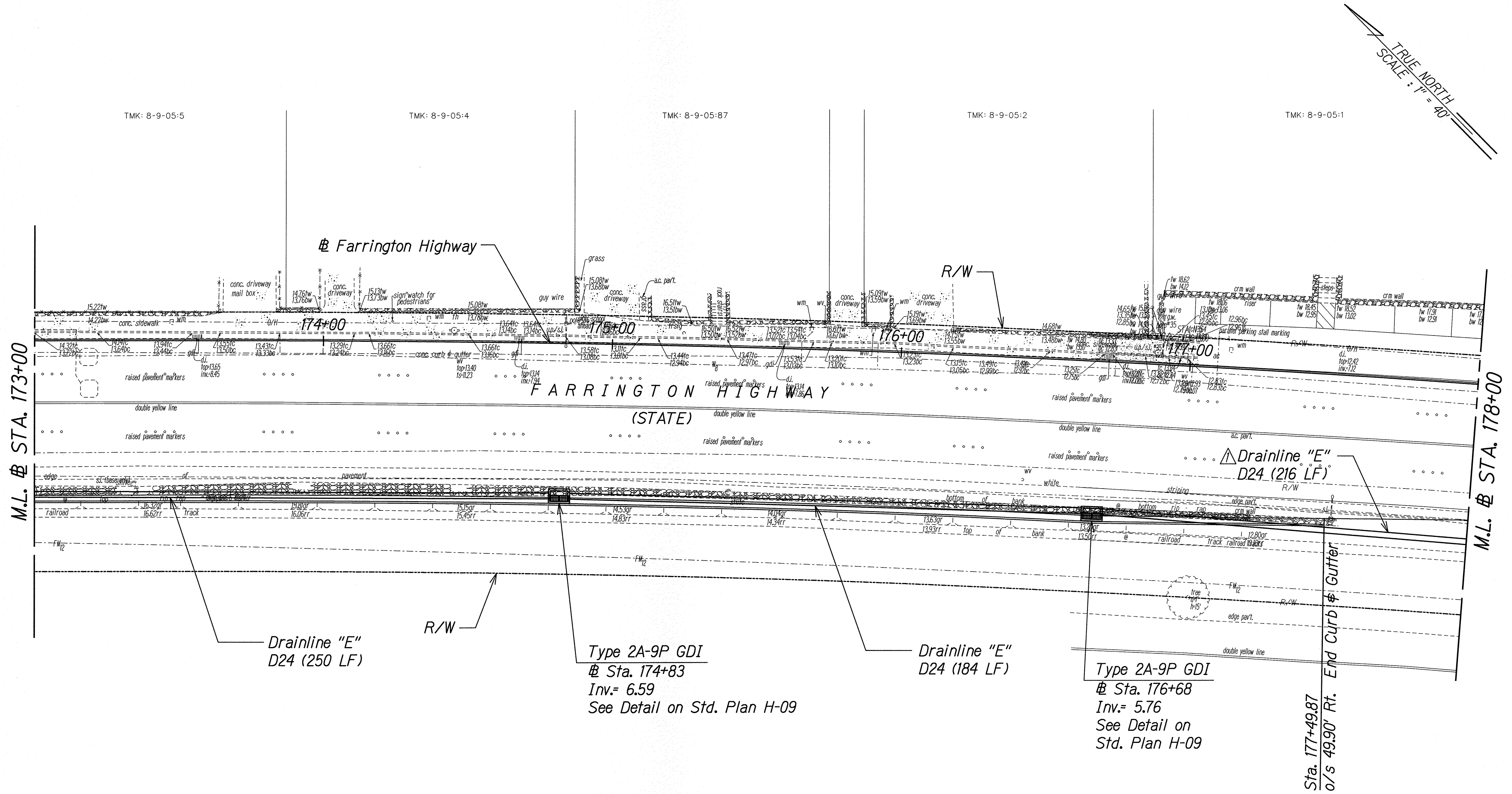
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN
STA. 168+00 TO 173+00

**FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NAWAKULI AVENUE AND HALEAKALA AVENUE**
Federal-Aid Project No. STP-093-1(22)

Scale: 1"=20' Date: April 2013

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	65	230



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NO.	

T:\DOT-FARRINGTON HWY INTERSECTIONS\NANAKULI\HALEAKALA\CADD\Sheets\drainage\drn-08.dgn

CONTRACT CHANGE ORDER NO. 27
Attachment 1

4/22/15

DATE

Revised Sewerline "E"

REVISION

GERALD D. ANDRADE

LICENSED PROFESSIONAL ENGINEER

No. 10377-C

HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature

04/30/16

EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

DRAINAGE PLAN

STA. 173+00 TO 178+00

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS

AT NANAKULI AVENUE AND HALEAKALA AVENUE

Federal-Aid Project No. STP-093-1(22)

Scale: 1"=20'

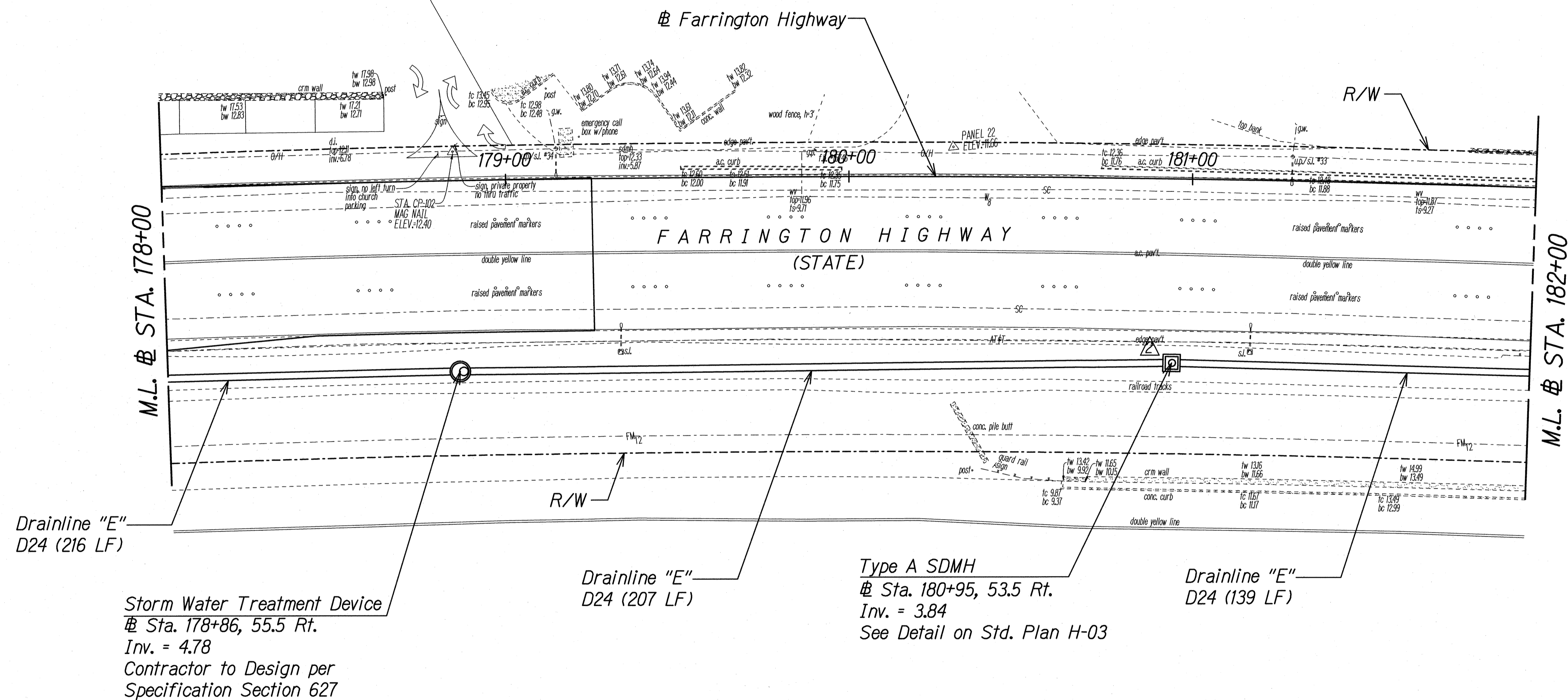
Date: April 2013



SHEET No. D-7 OF 9 SHEETS

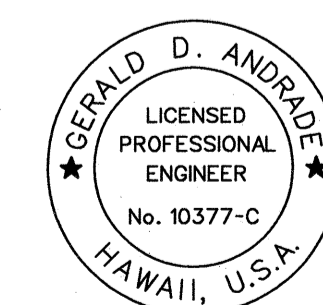
C.O. 65

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 66	230

TRUE NORTH
SCALE : 1" = 20'



11/17/17	 Revised Drainline "E"
4/23/15	 Revised Drainline "E"
DATE	REVISION



THIS WORK WAS PREPARED BY M
OR UNDER MY SUPERVISION.

SIGNATURE 04/30
EXPIRATION DATE
OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PLAN

STA. 178+00 TO 182+00

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NANAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)

Scale: 1"=20' Date: April 2013

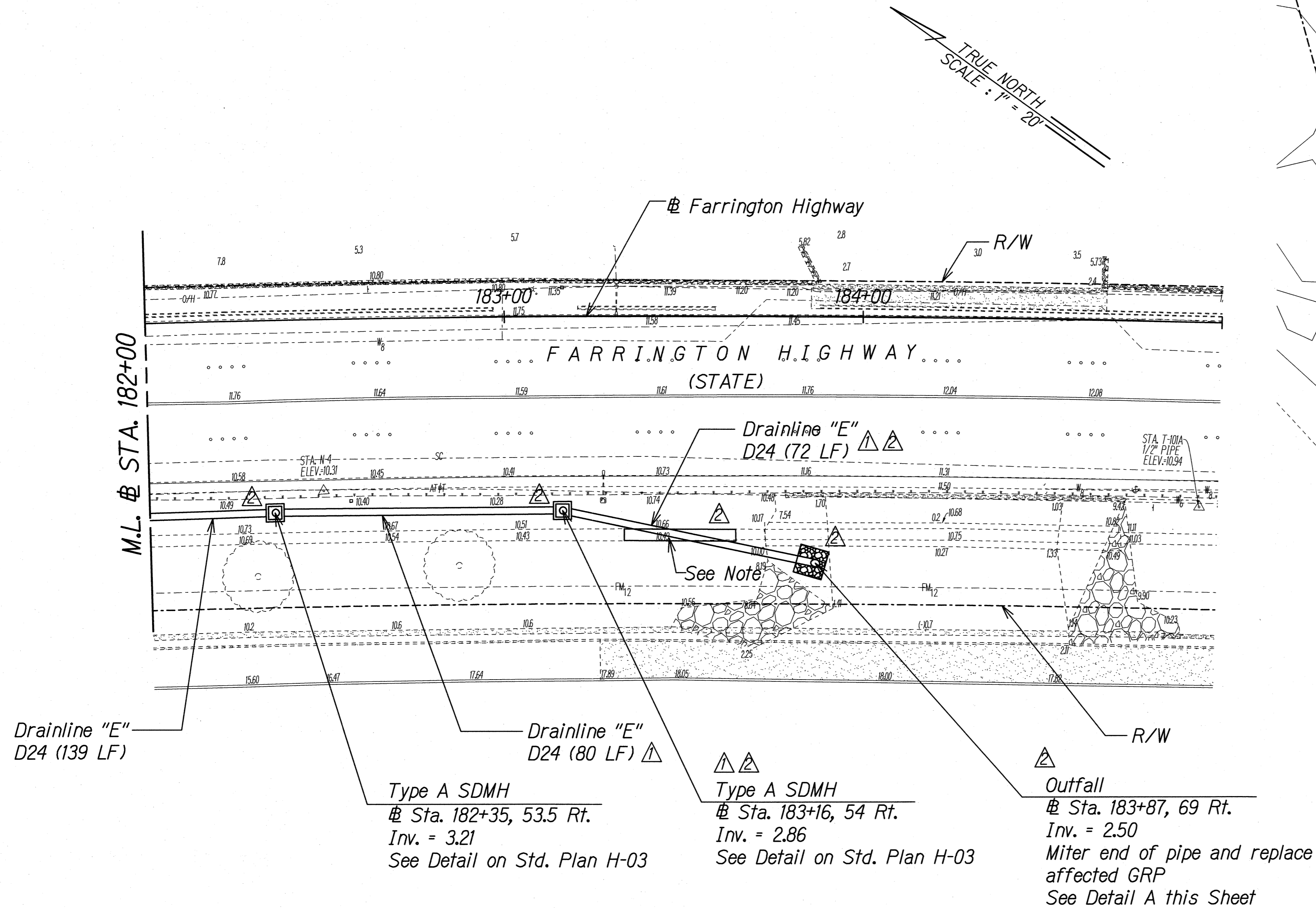
SHEET No. *D-8* OF *9* SHEETS

CONTRACT CHANGE ORDER NO. 27
Attachment 1

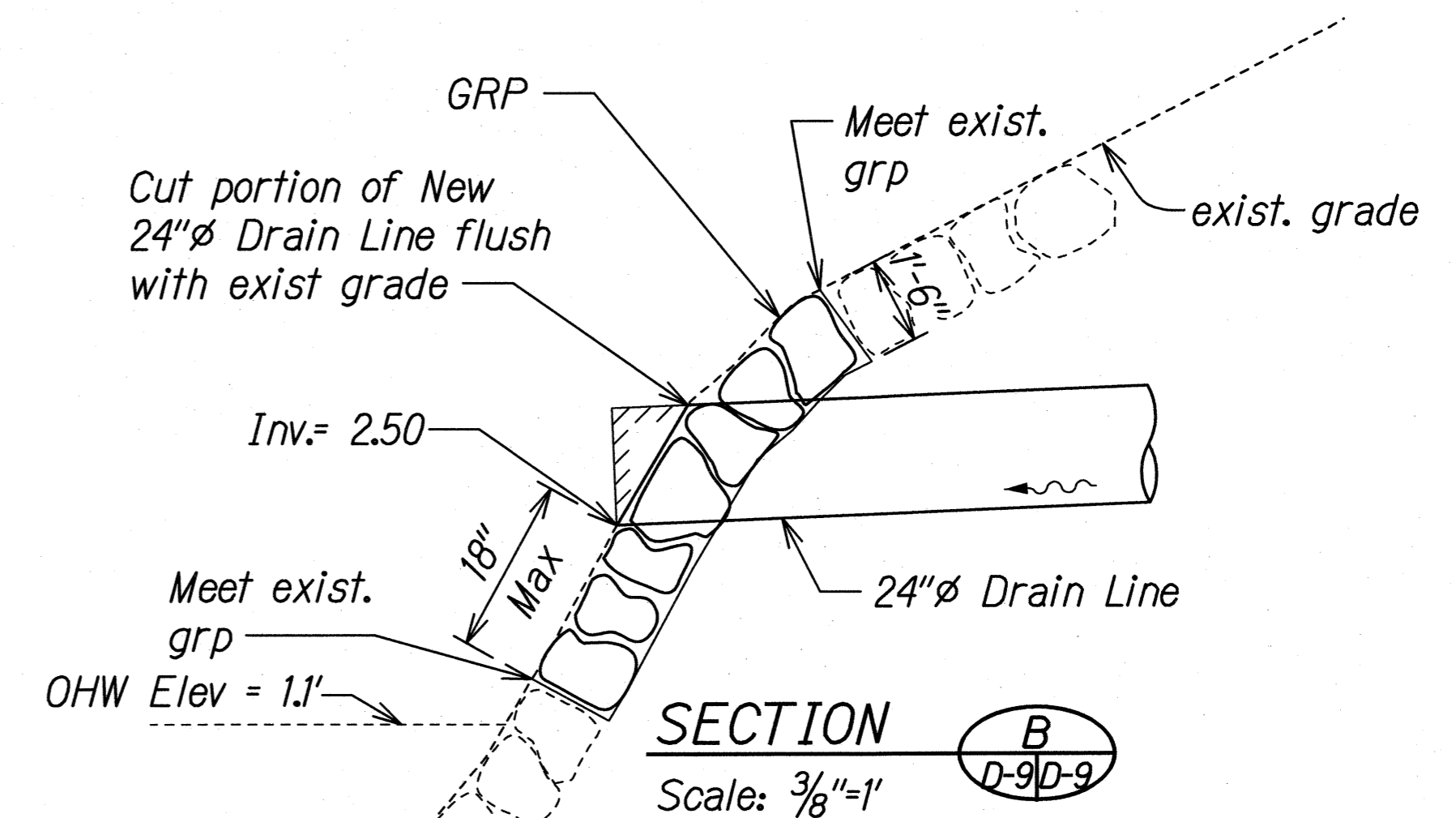
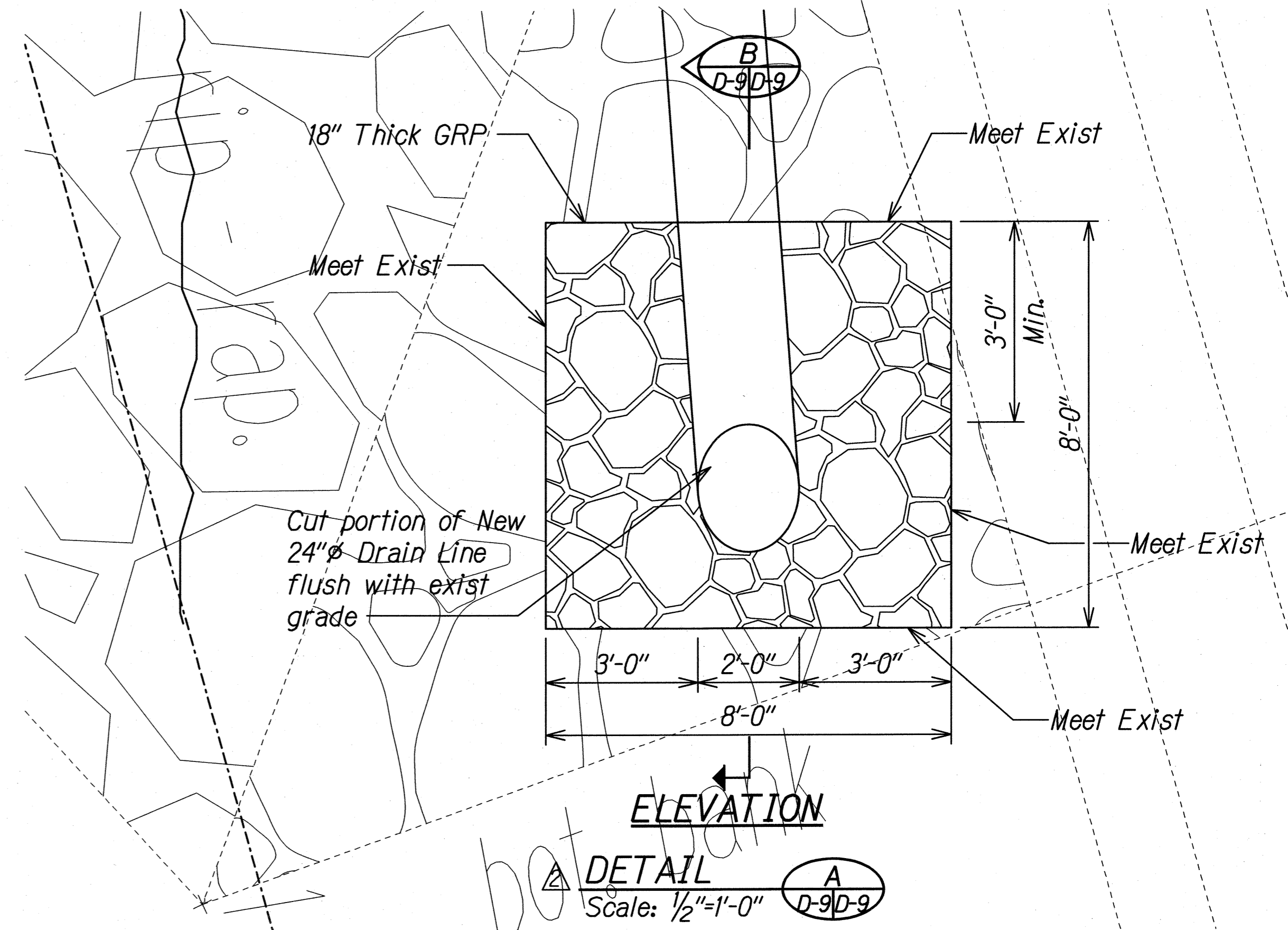
ORIGINAL PLAN	SURVEY PLOTTED BY _____ DATE _____
NOTE BOOK	DRAWN BY _____
	TRACED BY _____
	DESIGNED BY _____
	QUANTITIES BY _____
S _o _____	CHECKED BY _____

T./DOT-FARRINGTON HWY INTERSECTIONS NAWAKULI HALEAKALA/CADD/Sheets/drainage/drn_09.dgn

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O 67	230



- NOTE:**
- 1) Restore rail tracks upon completion of drainline.
 - 2) All construction work shall occur above the Ordinary High Water (OHW) Mark elevation = 1.1'



11/17/17	Revised Drainline "E"
4/23/15	Revised Drainline "E"
DATE	REVISION

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Gerald D. Andrade* Date: 04/30/18

EXPIRATION DATE OF THE LICENSE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

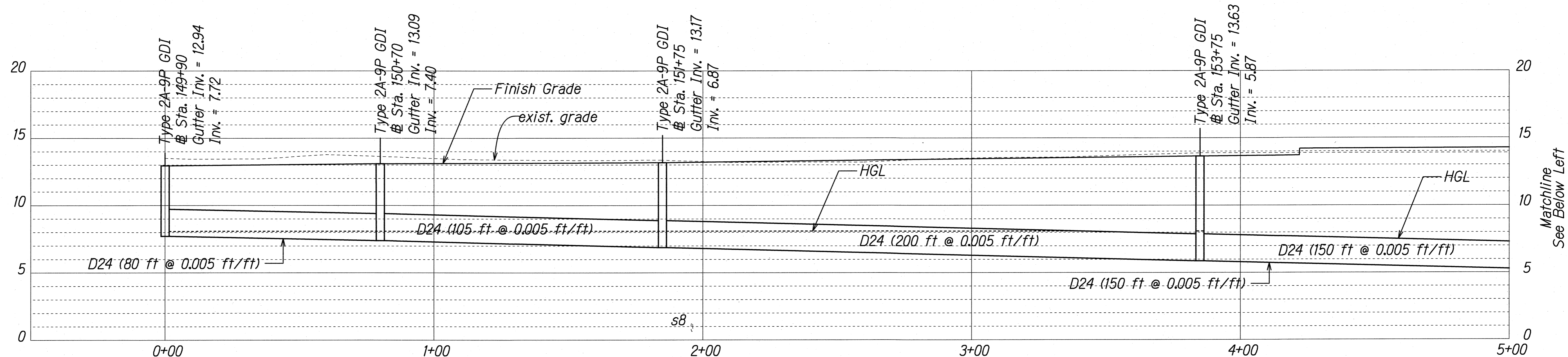
DRAINAGE PLAN
STA. 182+00 TO 185+00

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NAKAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)

Scale: 1"=20' Date: April 2013

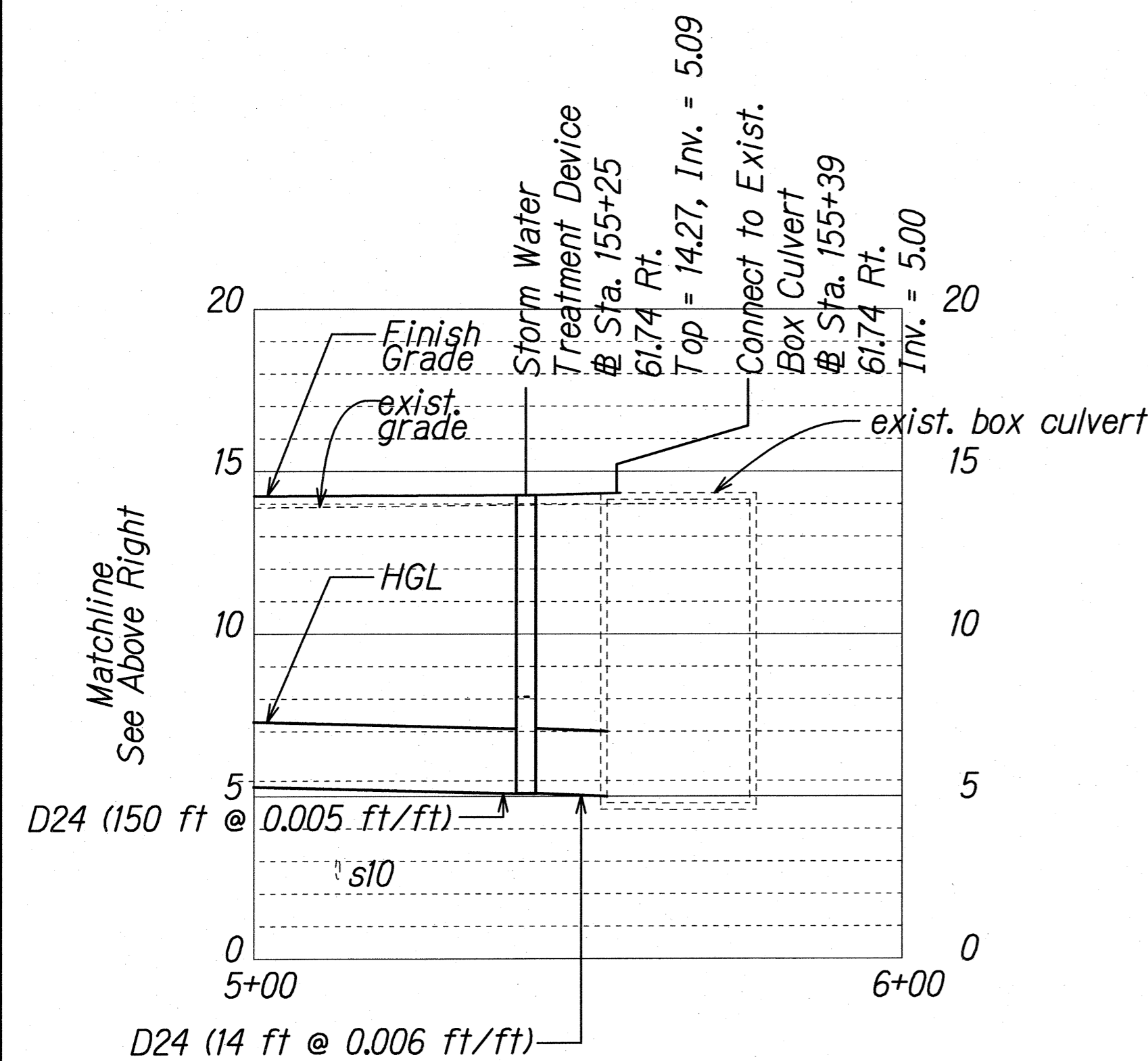
CONTRACT CHANGE ORDER NO. 27
Attachment 1

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 68	230



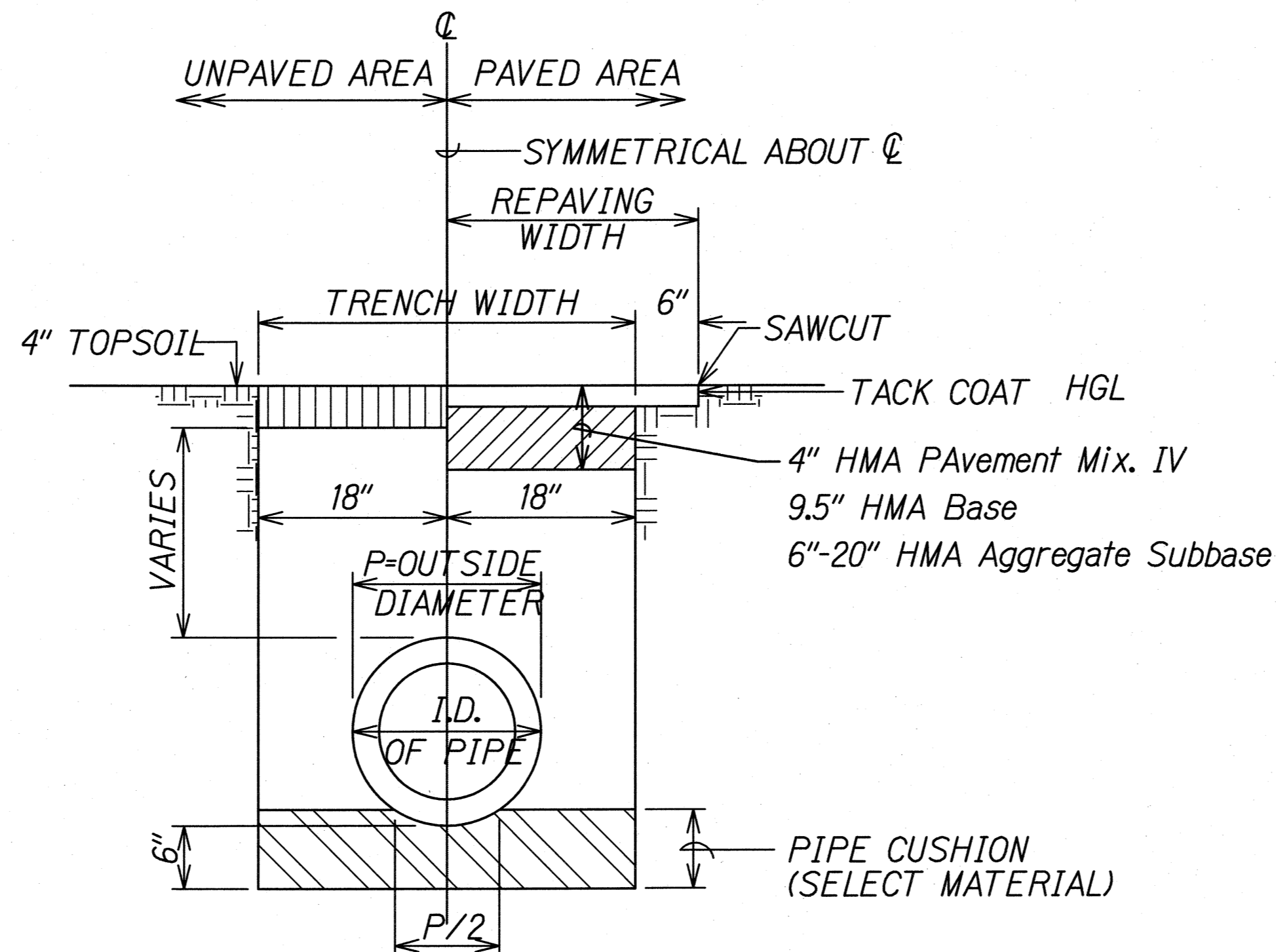
PROFILE - DRAINLINE "A" △△

Scale: Horiz. 1"=20'
Vert. 1"=4'



PROFILE - DRAINLINE "A" △△

Scale: Horiz. 1"=20'
Vert. 1"=4'



TYPICAL DRAIN PIPE
TRENCH RESTORATION DETAIL

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

11/17/17	△ Revised Drainline "A"
4/22/15	△ Revised Drainline "A"
DATE	REVISION

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

SIGNATURE: *Gerald D. Andrade* EXPIRATION DATE OF THE LICENSE: 04/30/18

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PROFILES - 1

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NANAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)

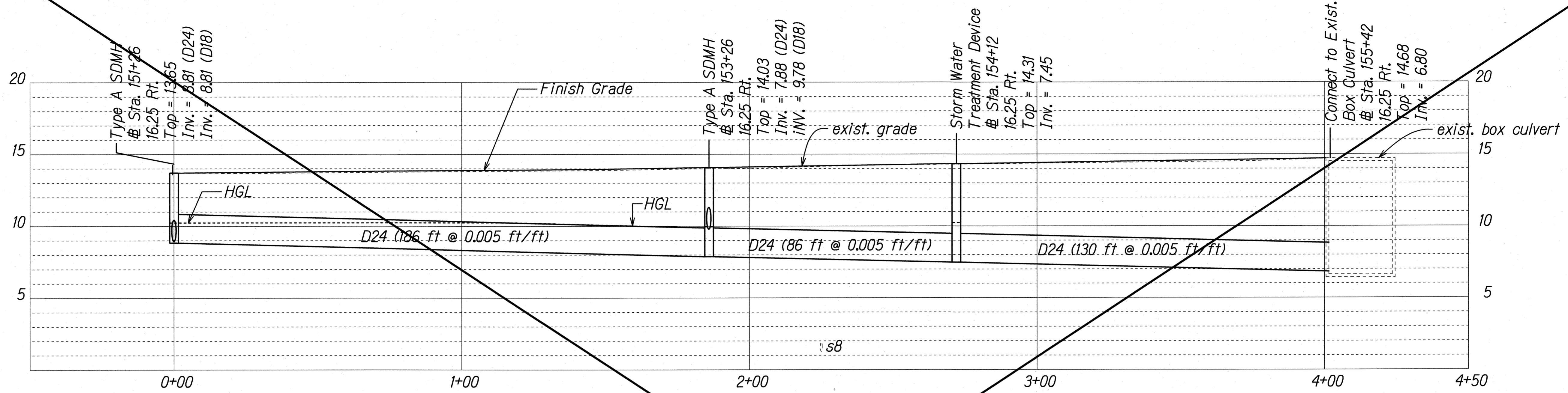
Scale: As Shown Date: April 2013


SHEET No. DP-1 OF 6 SHEETS

C.O. 68

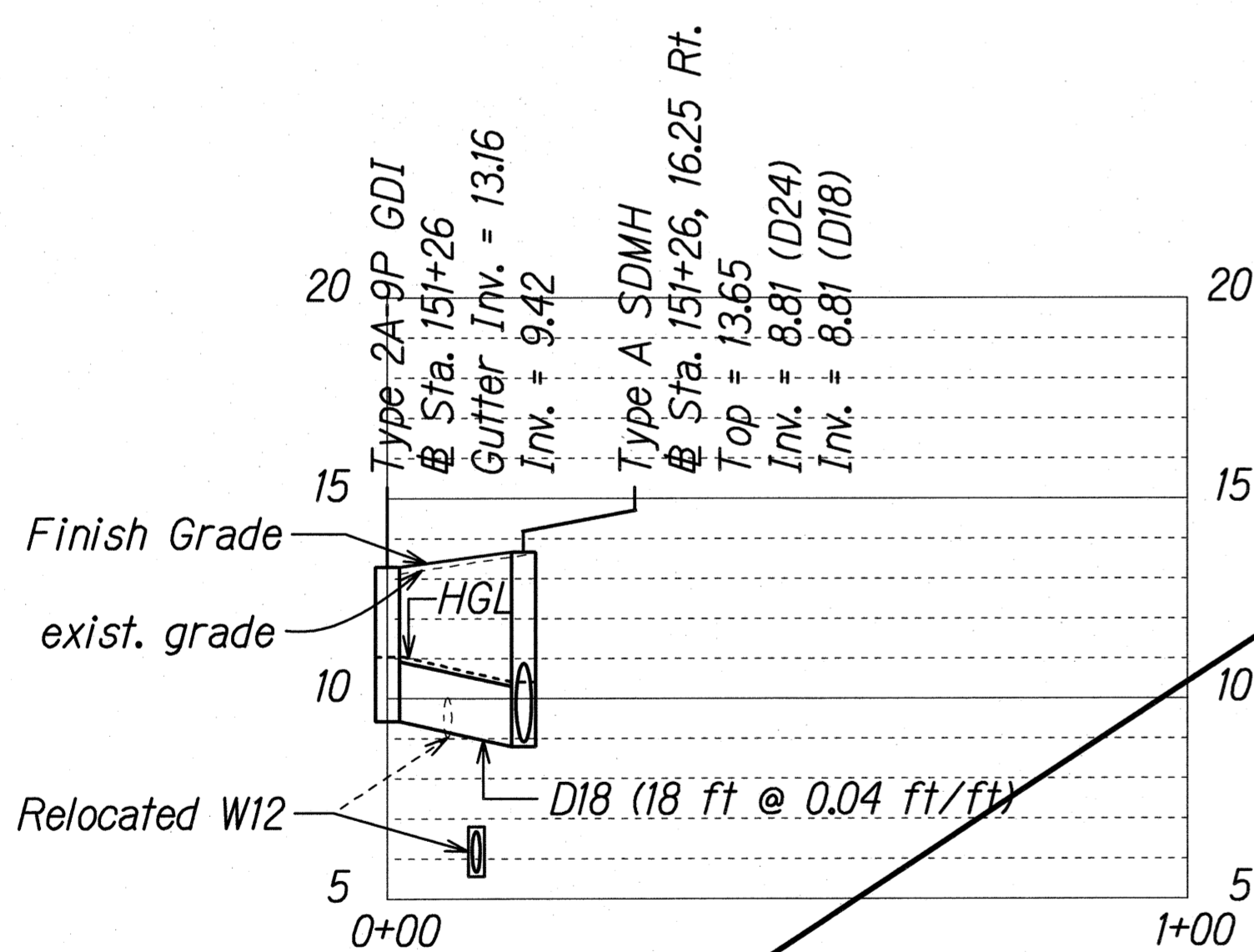
CONTRACT CHANGE ORDER NO. 27
Attachment 1


FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 69	230

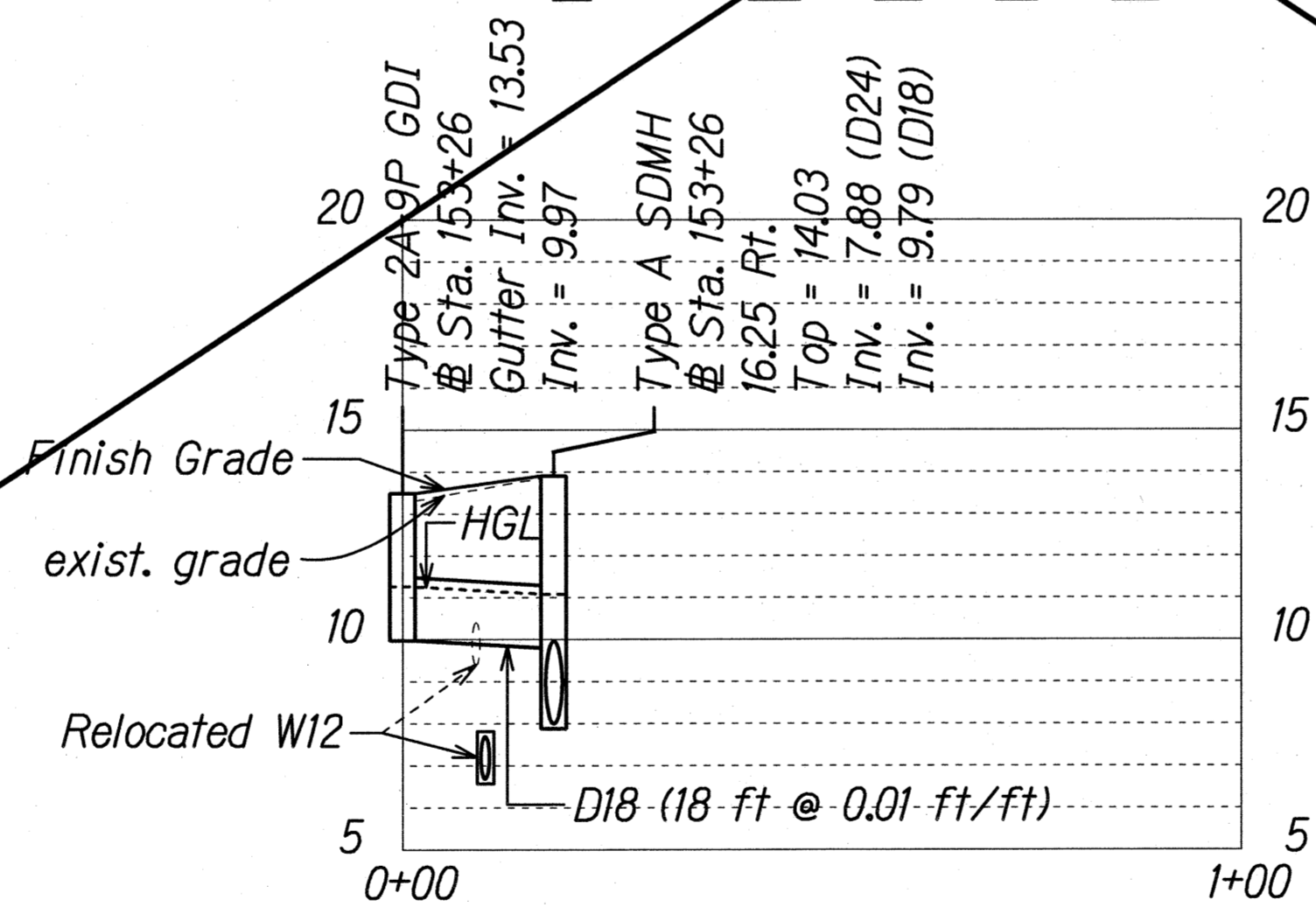



PROFILE - DRAINLINE "B" 
 Scale: Horiz. 1"=20'
 Vert. 1"=4'



N.I.C.

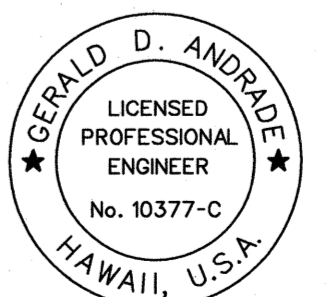


PROFILE - DRAINLINE "B-1" 
 Scale: Horiz. 1"=20'
 Vert. 1"=4'



PROFILE - DRAINLINE "B-2" 
 Scale: Horiz. 1"=20'
 Vert. 1"=4'

8/7/17	 Sheet Deleted
4/22/15	 Revised Drainline "B", "B-1", "B-2"
DATE	REVISION



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
 SIGNATURE: *Gerald D. Andrade* EXPIRATION DATE OF THE LICENSE: 04/30/18

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DRAINAGE PROFILES - 2

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
 AT NANAKULI AVENUE AND HALEAKALA AVENUE
 Federal-Aid Project No. STP-093-1(22)

Scale: As Shown Date: April 2013

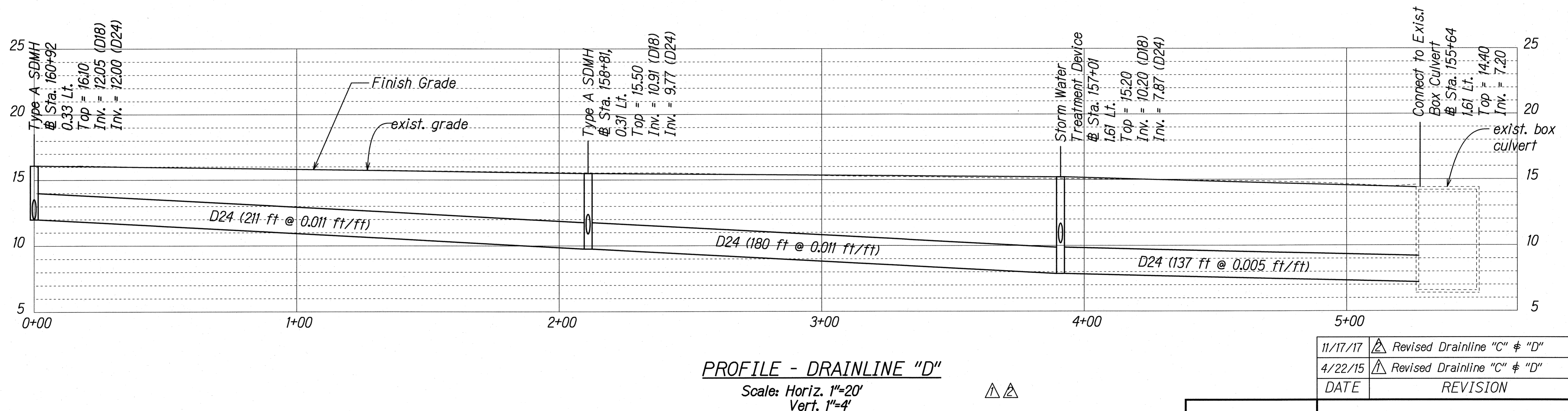
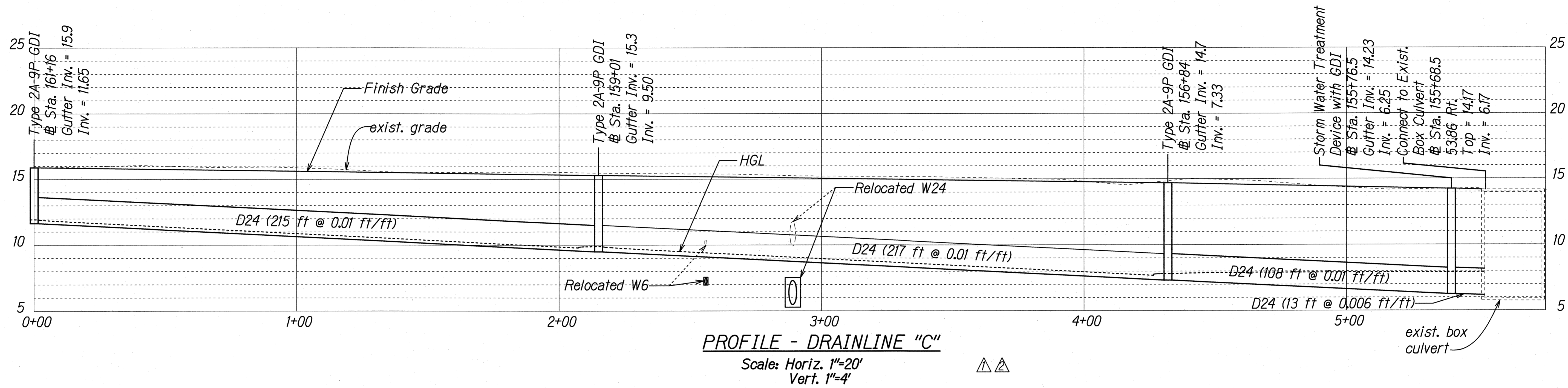
CONTRACT CHANGE ORDER NO. 27
 Attachment 1

"AS-BUILT"

ORIGINAL PLAN	DATE
DESIGNED BY	
CHECKED BY	
DATE	

T:\DOT-FARRINGTON HWY INTERSECTIONS NANAKULI HALEAKALA\SHEETS\DRAINAGE PROFILE\DRW_PROF_03.dgn

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 70	230



11/17/17	Revised Drainline "C" & "D"
4/22/15	Revised Drainline "C" & "D"
DATE	REVISION

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Gerald D. Andrade* Date: 04/30/18

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DRAINAGE PROFILES - 3

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
 AT NANAKULI AVENUE AND HALEAKALA AVENUE
 Federal-Aid Project No. STP-093-1(22)

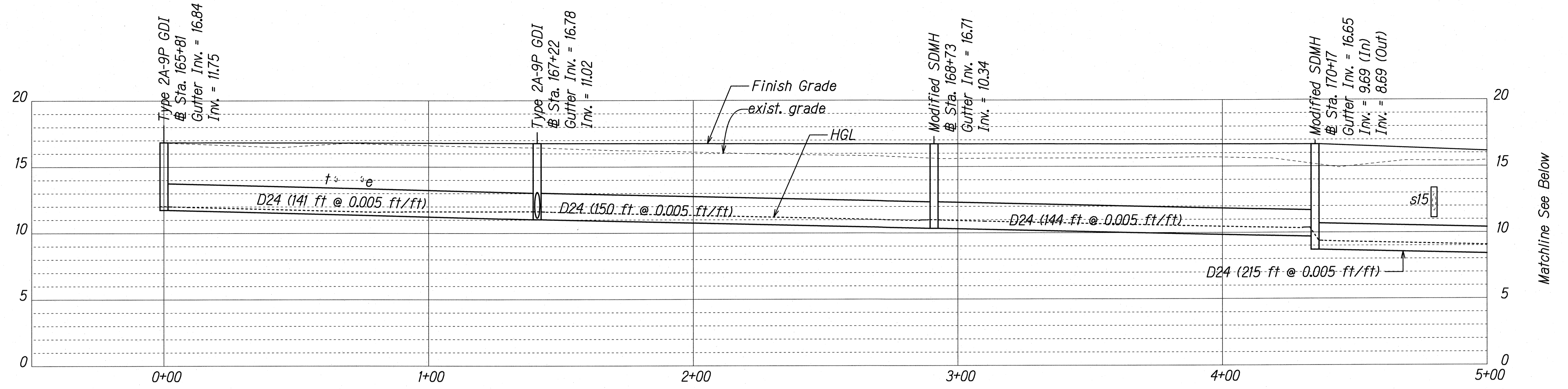
Scale: As Shown Date: April 2013

CONTRACT CHANGE ORDER NO. 27
Attachment 1

ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	

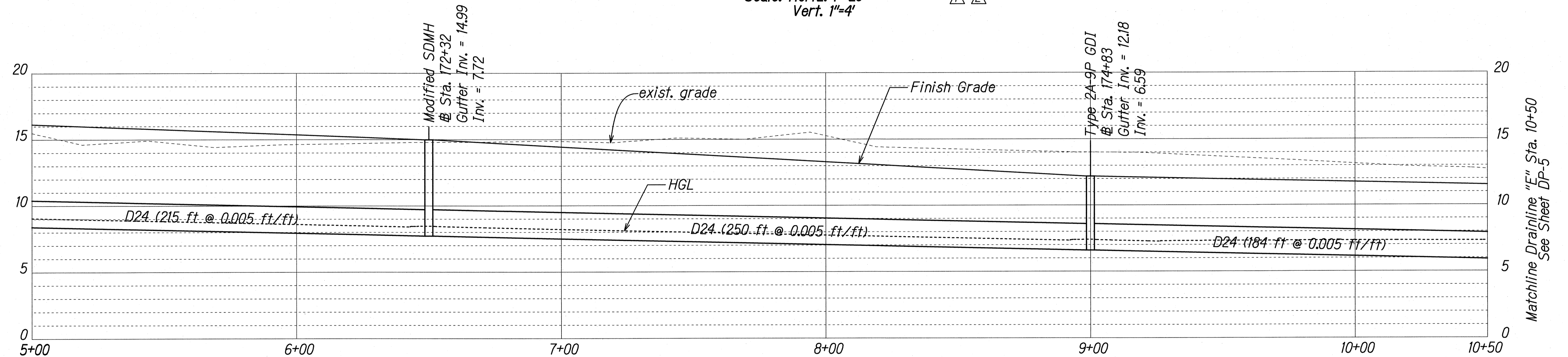
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FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O 71	230



PROFILE - DRAINLINE "E"

Scale: Horiz. 1"=20'
Vert. 1"=4'



PROFILE - DRAINLINE "E"

Scale: Horiz. 1"=20'
Vert. 1"=4'

11/17/17	Revised Drainline "E"
4/3/15	Revised Drainline "E"
DATE	REVISION

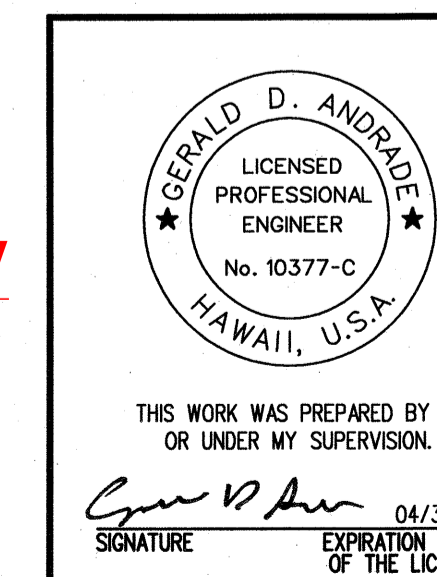
CONTRACT CHANGE ORDER NO. 27

Attachment 1

Approved: _____

Chief, Wastewater Branch, DPP

Date _____



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PROFILES - 4

**FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)**

Scale: As Shown Date: April 2013

SHEET No. DP-4 OF 6 SHEETS

For Construction of Drainline "E" Only

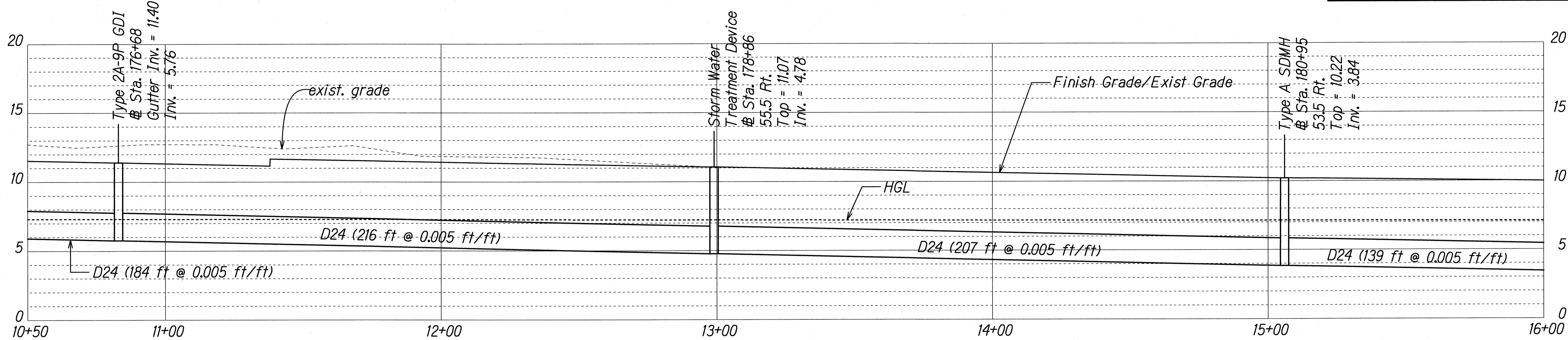
C.O. 71

ORIGINAL PLAN	DATE
NOTED BY	
DESIGNED BY	
CHECKED BY	
DATE	

T:\DOT-FARRINGTON HWY INTERSECTIONS\NAKULI HALEAKALA\SHEETS\DRAINAGE PROFILE\DRN_PROF_05.dgn

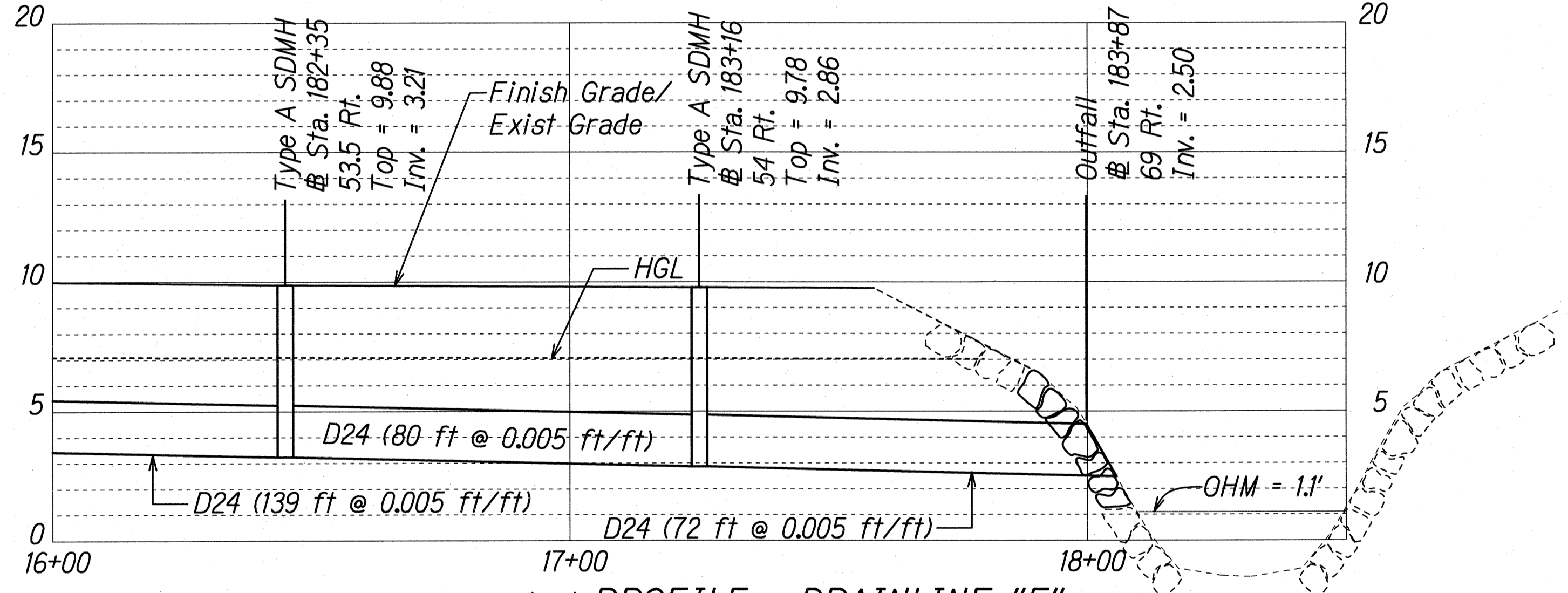
FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	C.O. 72	230

Matchline Drainline "E" Sta. 10+50
See Sheet DP-4

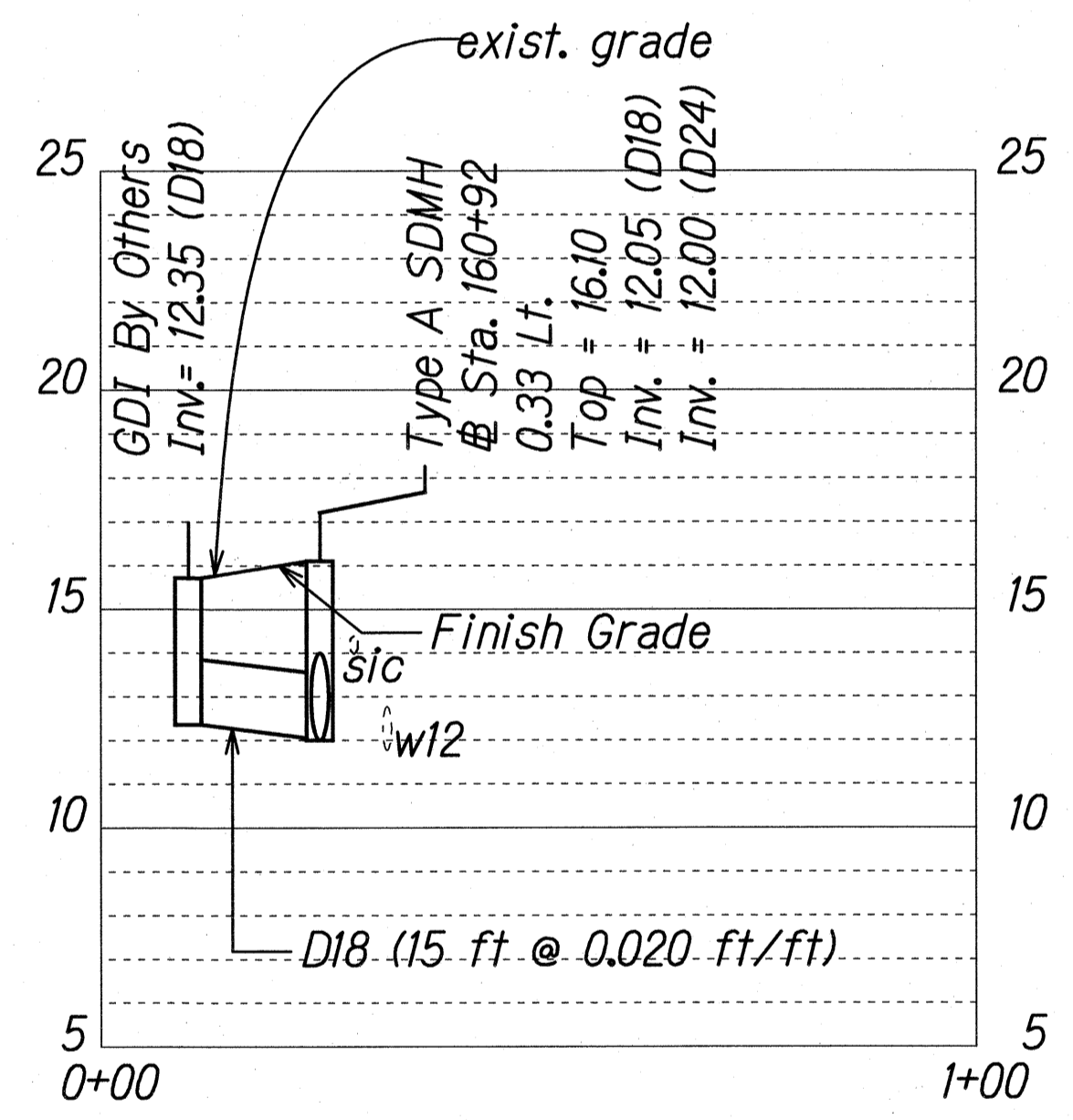


PROFILE - DRAINLINE "E" $\triangle \triangle$
Scale: Horiz. 1"=20'
Vert. 1"=4'

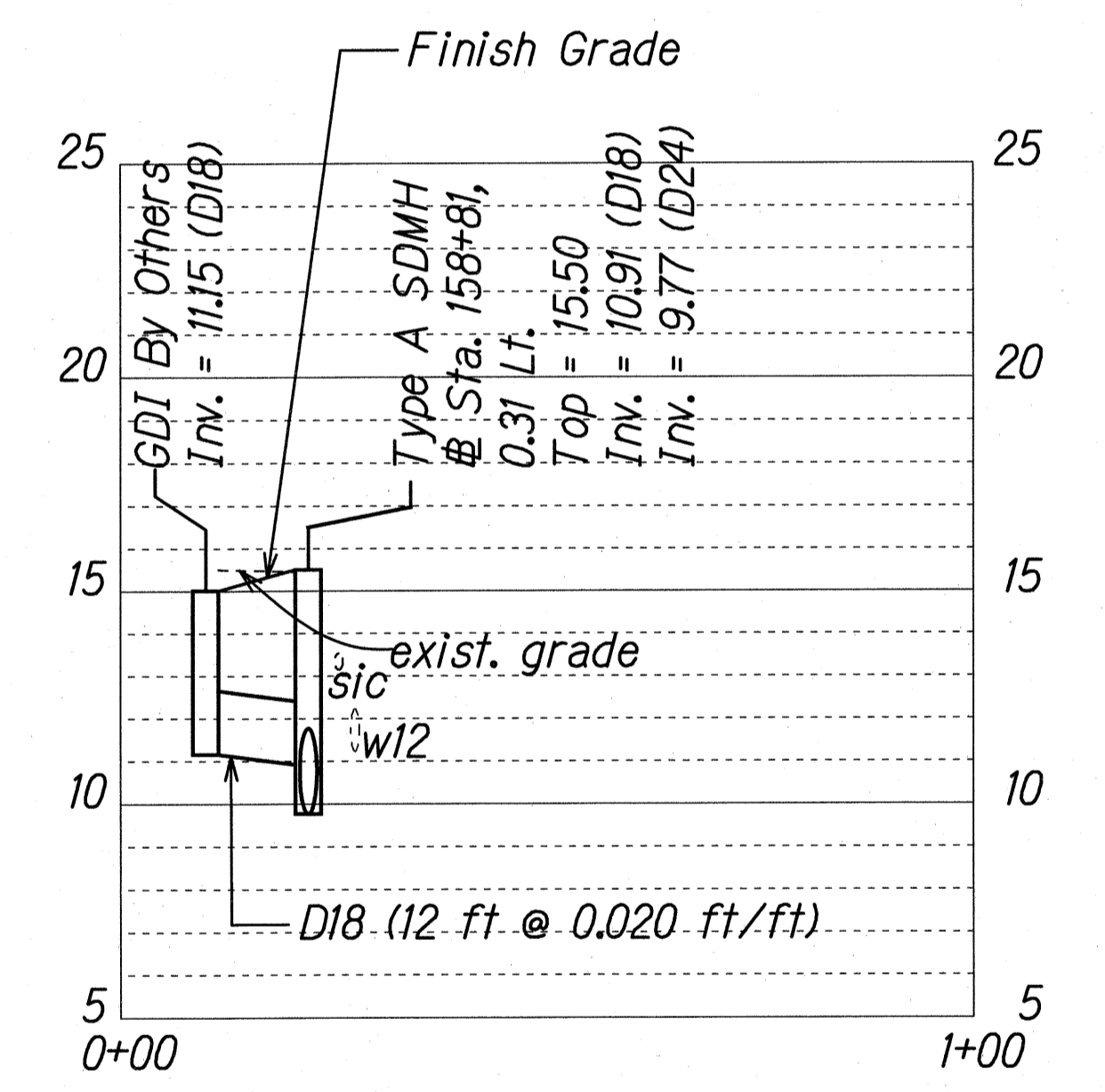
Matchline
See Above Right



$\triangle \triangle$ PROFILE - DRAINLINE "E"
Scale: Horiz. 1"=20'
Vert. 1"=4'
Note:
All construction work shall occur
above the Ordinary High Water (OHW)
Mark elevation = 1.1'



PROFILE - DRAINLINE "F-1" $\triangle \triangle$
Scale: Horiz. 1"=20'
Vert. 1"=4'



PROFILE - DRAINLINE "G-1" $\triangle \triangle$
Scale: Horiz. 1"=20'
Vert. 1"=4'

11/17/17	\triangle Revised Drainage Profile "E"
4/22/15	\triangle Revised Drainage Profile "E"
DATE	REVISION

THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

Signature: *Gerald D. Andrade*
Date: 04/30/18

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PROFILES - 5

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)

Scale: As Shown Date: April 2013

CONTRACT CHANGE ORDER NO. 27
Attachment 1

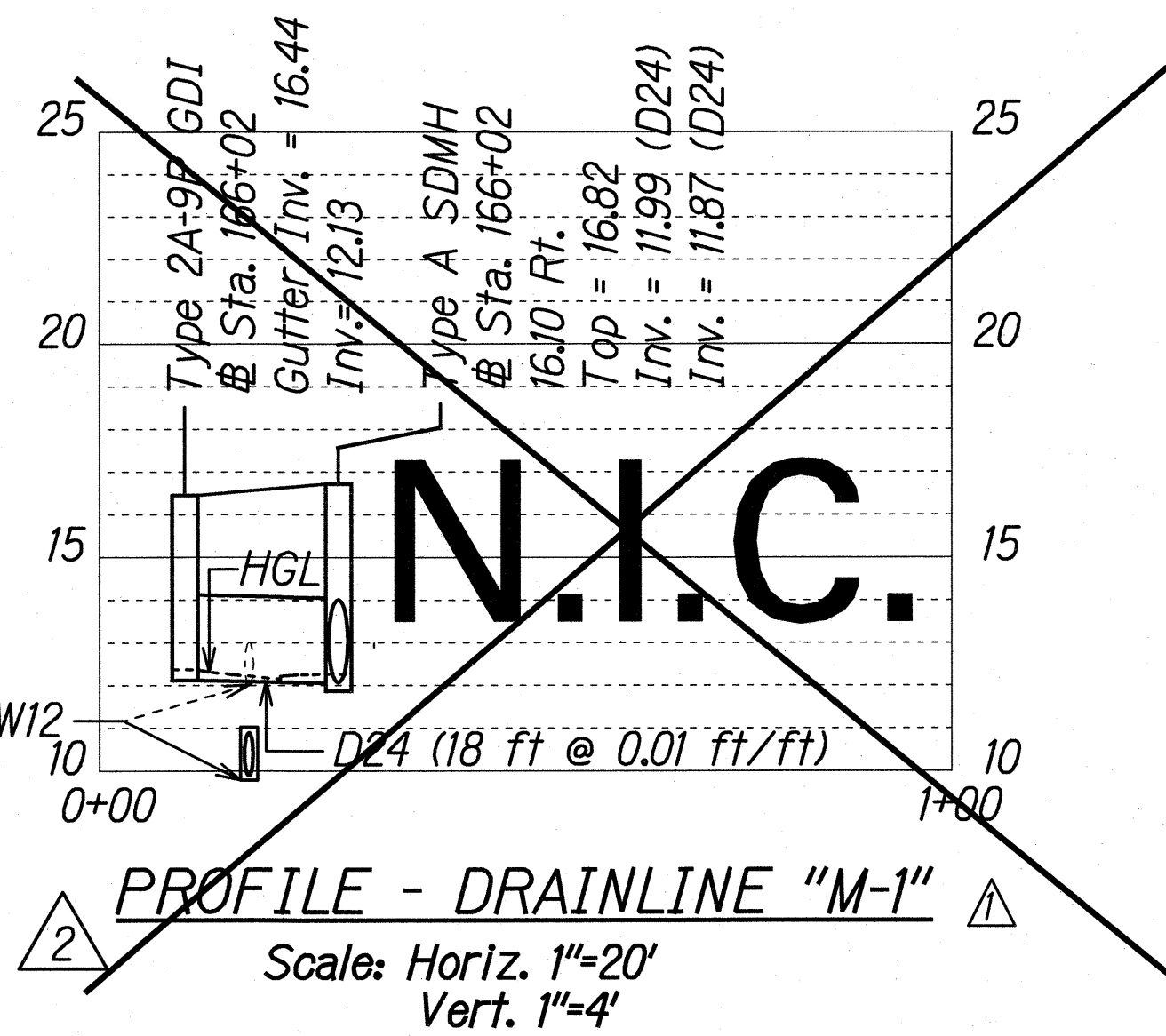
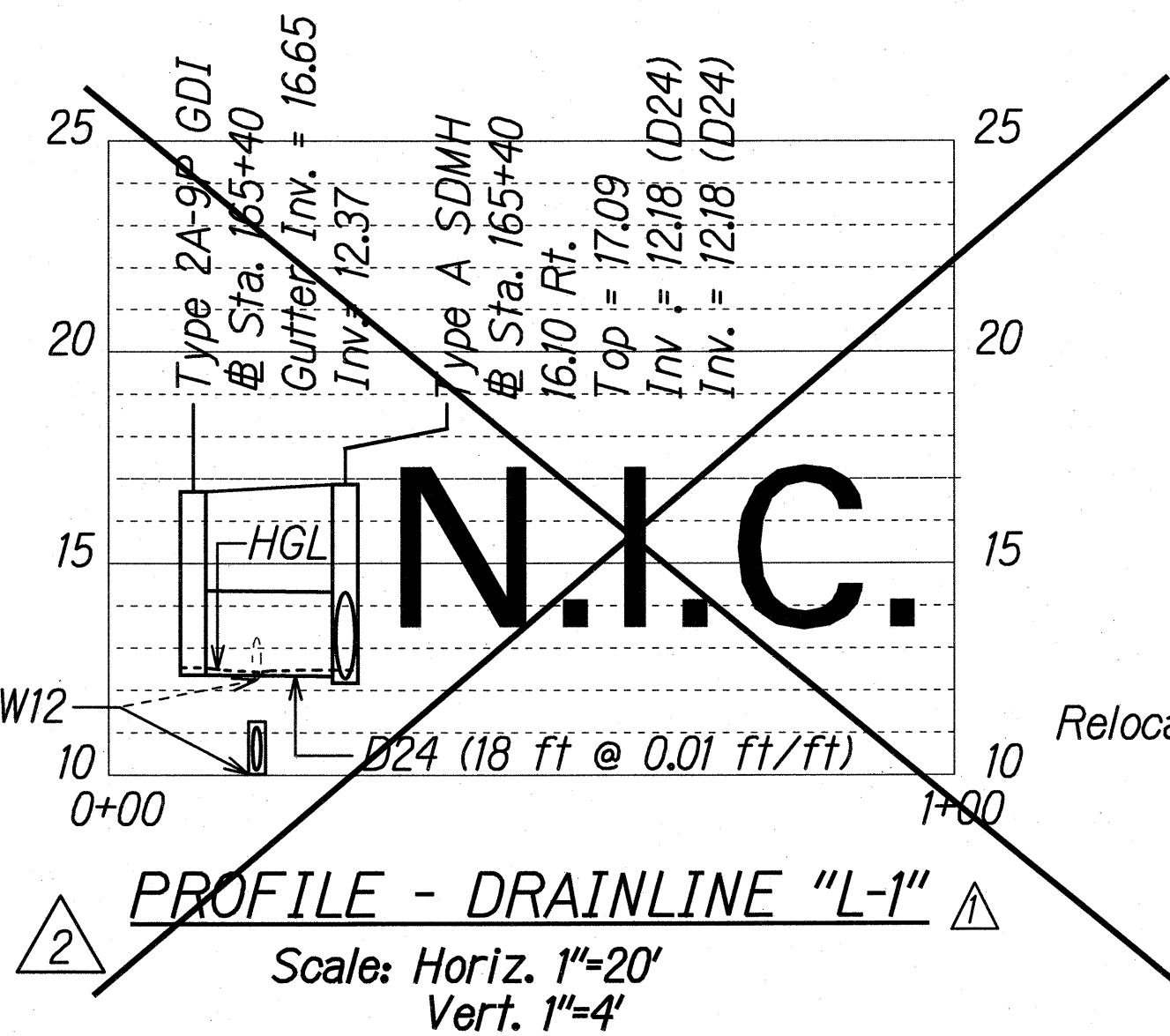
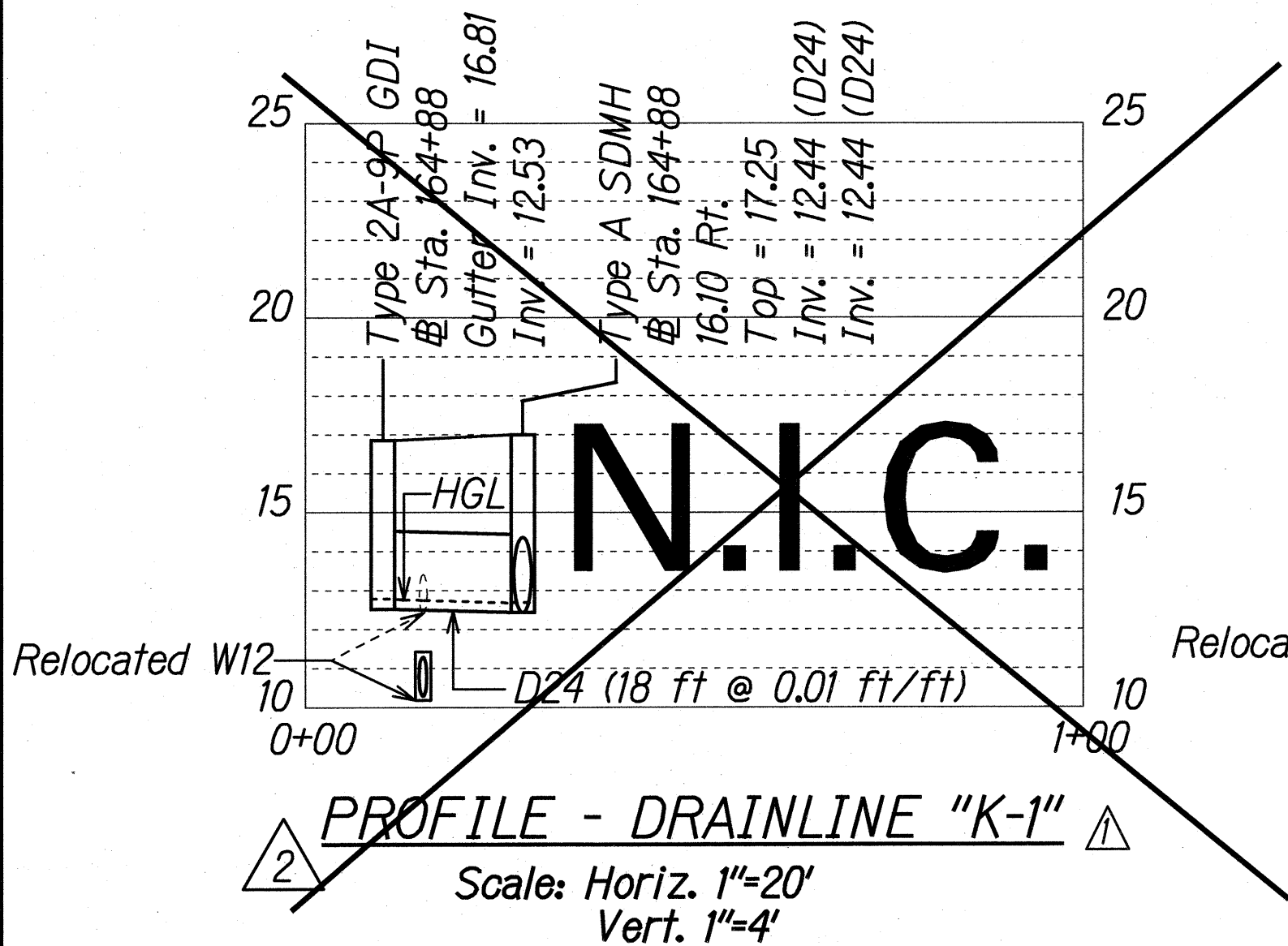
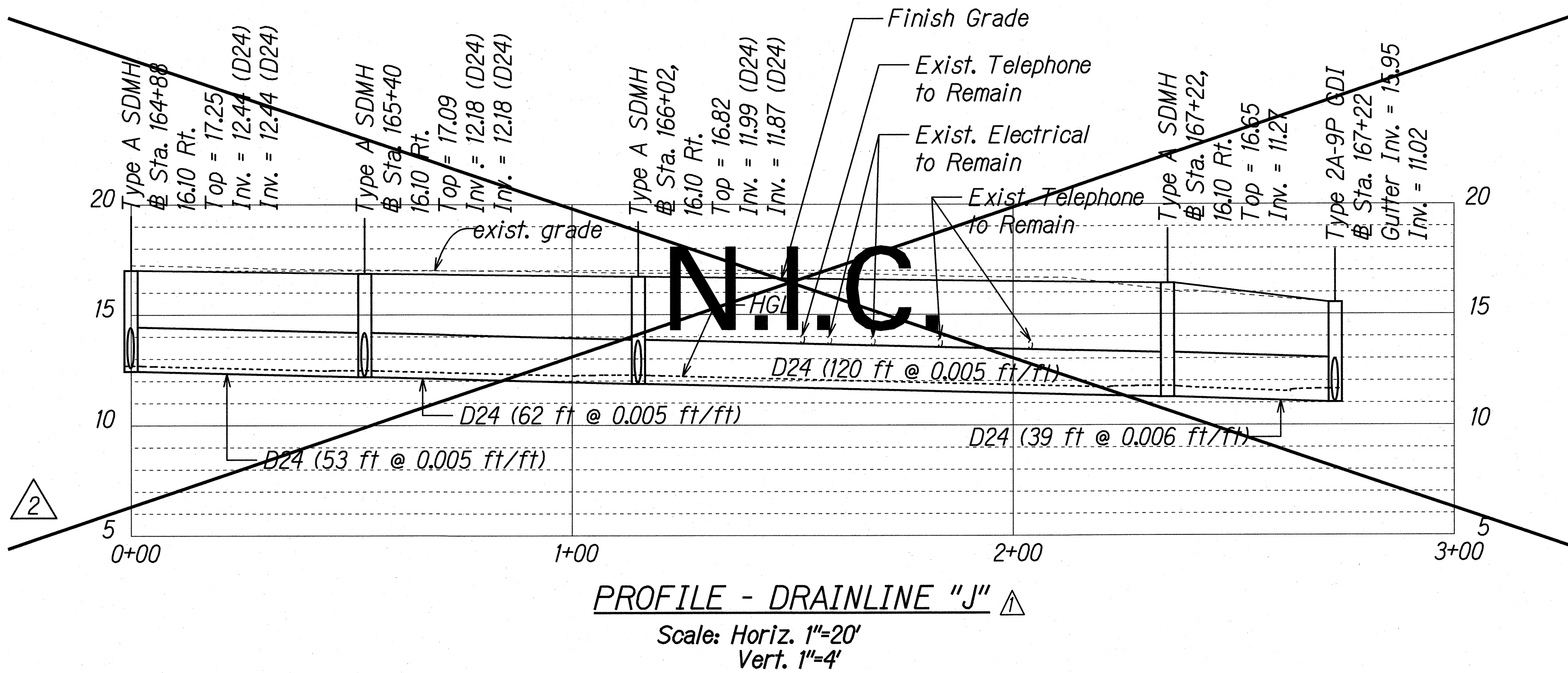
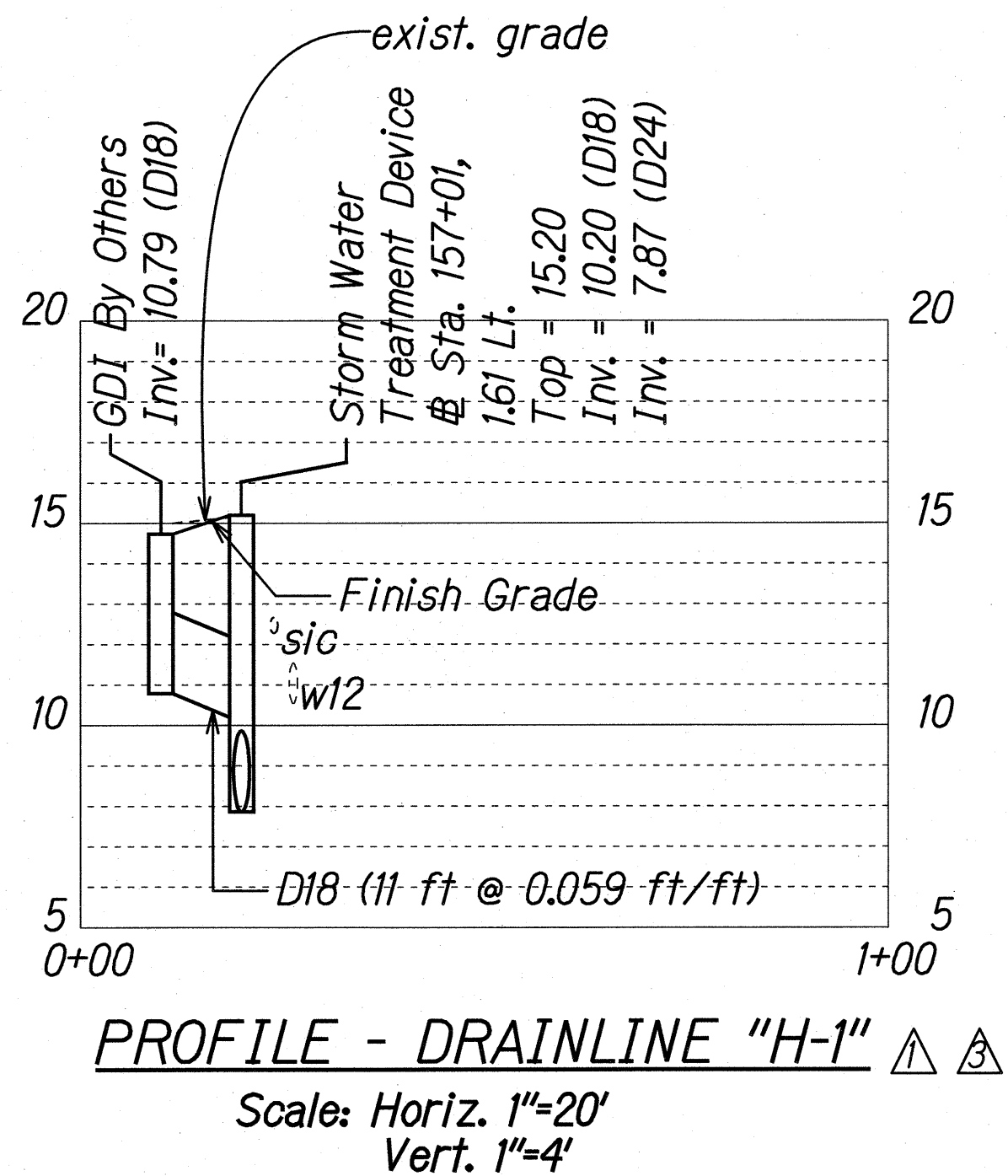
For Construction of Drainline "E" Only

C.O. 72

ORIGINAL PLAN	DATE
DESIGNED BY	
NOTED BY	
CHECKED BY	

T:\DOT-FARRINGTON HWY INTERSECTIONS\NANAKULI HALEAKALA\SHEETS\DRAINAGE PROFILE\DRN_PROF_06.dgn

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-093-1(22)	2013	CO. 73	230



11/17/17	Revised Drainline "H-1"
8/7/17	Deleted Profiles
4/22/15	Revised Drainline "H-1", "J", "K-1", "L-1" & "M-1"
DATE	REVISION

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: *Gerald D. Andrade* Date: 04/30/18

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE PROFILES - 6

FARRINGTON HIGHWAY INTERSECTION IMPROVEMENTS
AT NAKAKULI AVENUE AND HALEAKALA AVENUE
Federal-Aid Project No. STP-093-1(22)

Scale: As Shown Date: April 2013

CONTRACT CHANGE ORDER NO. 27
Attachment 1

"AS-BUILT"

C.O. 73

ORIGINAL PLAN	DATE
NOTED BY	
DESIGNED BY	
CHECKED BY	
QUANTITIES BY	
CHECKED BY	

T:\DOT-FARRINGTON HWY INTERSECTIONS\NAKAKULI HALEAKALA\DRAINAGE\PROFILE\DRNL_PROF_07.dgn