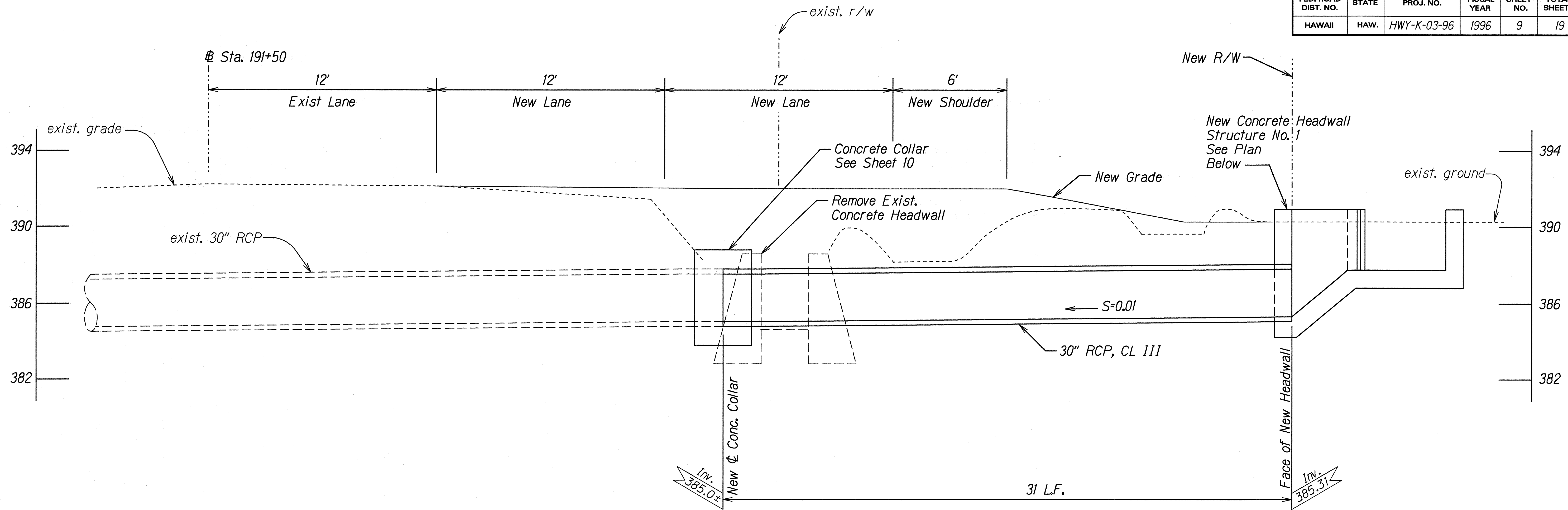
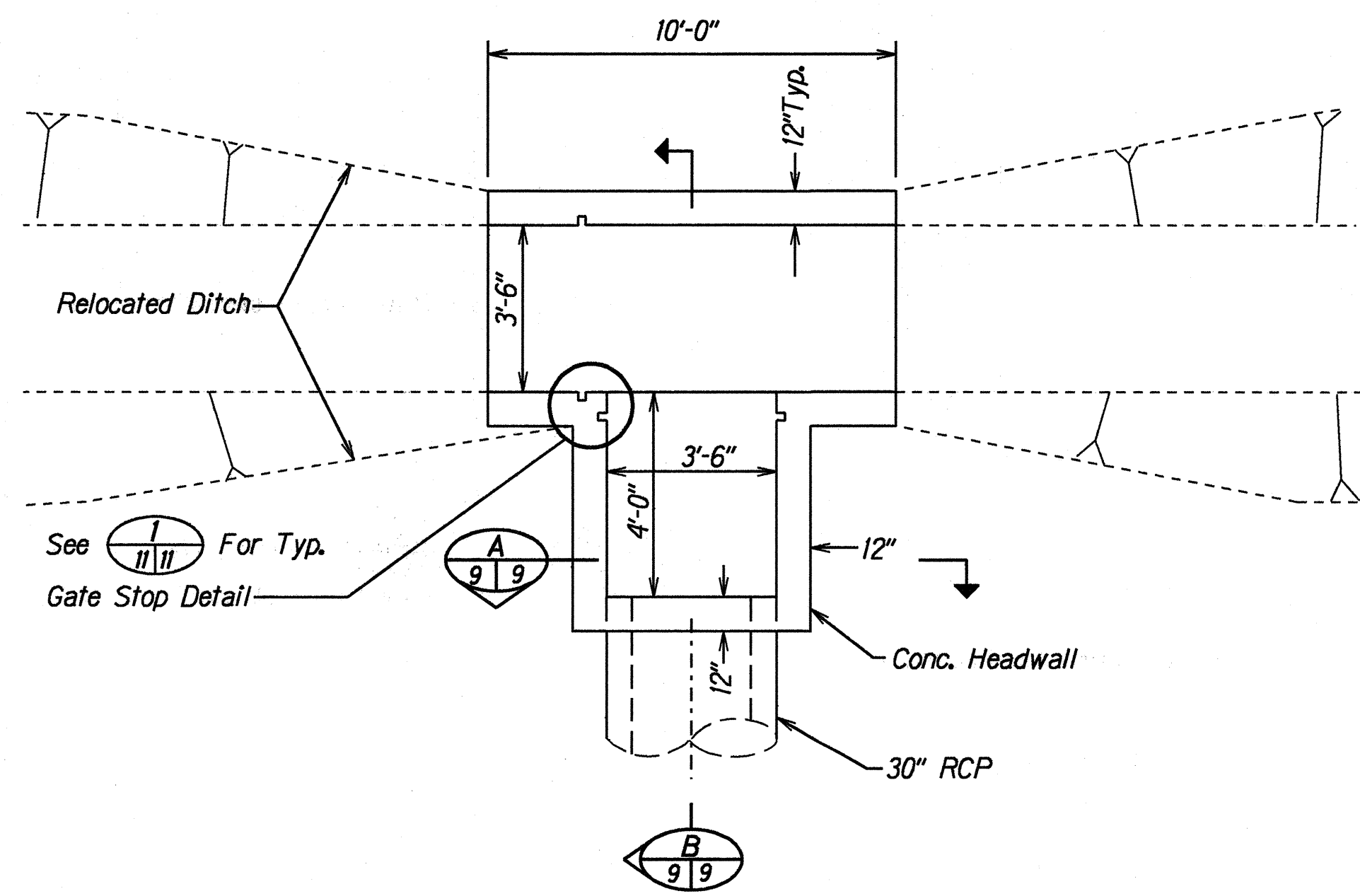


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-03-96	1996	9	19



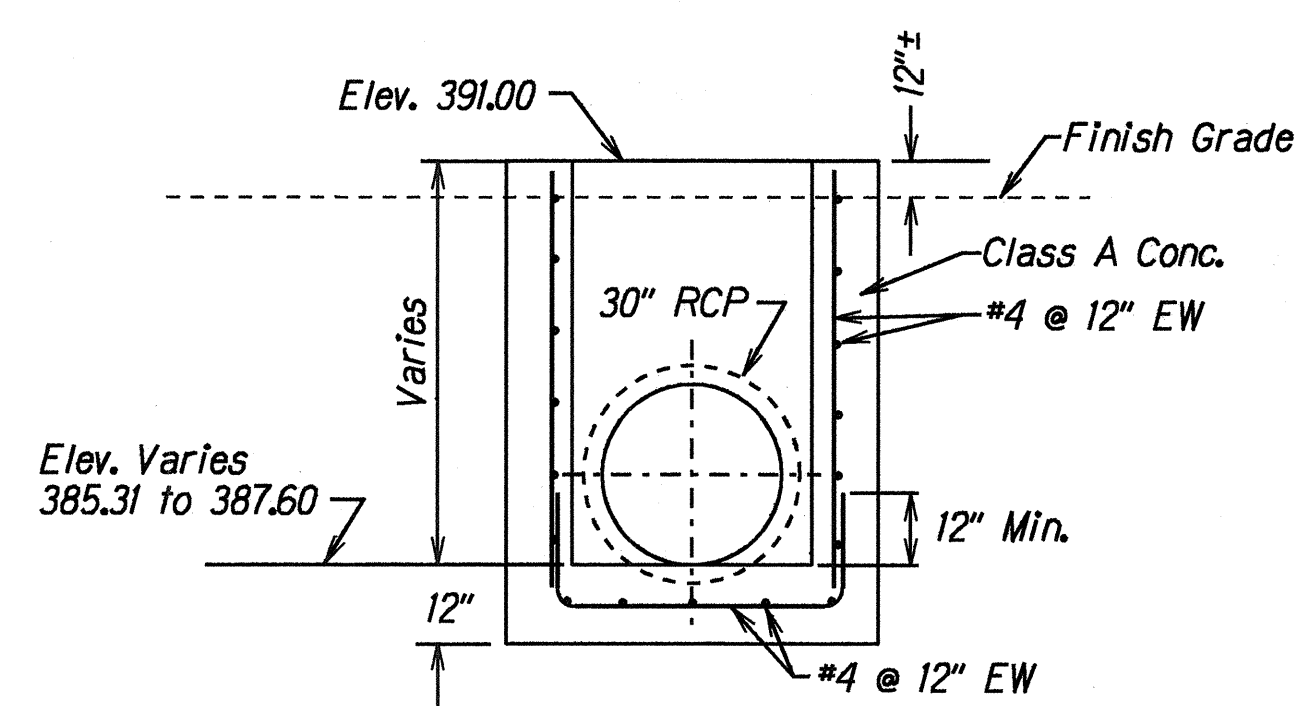
PROFILE - 30" CULVERT EXTENSION @ 191+50

Scale: 3/8" = 1'



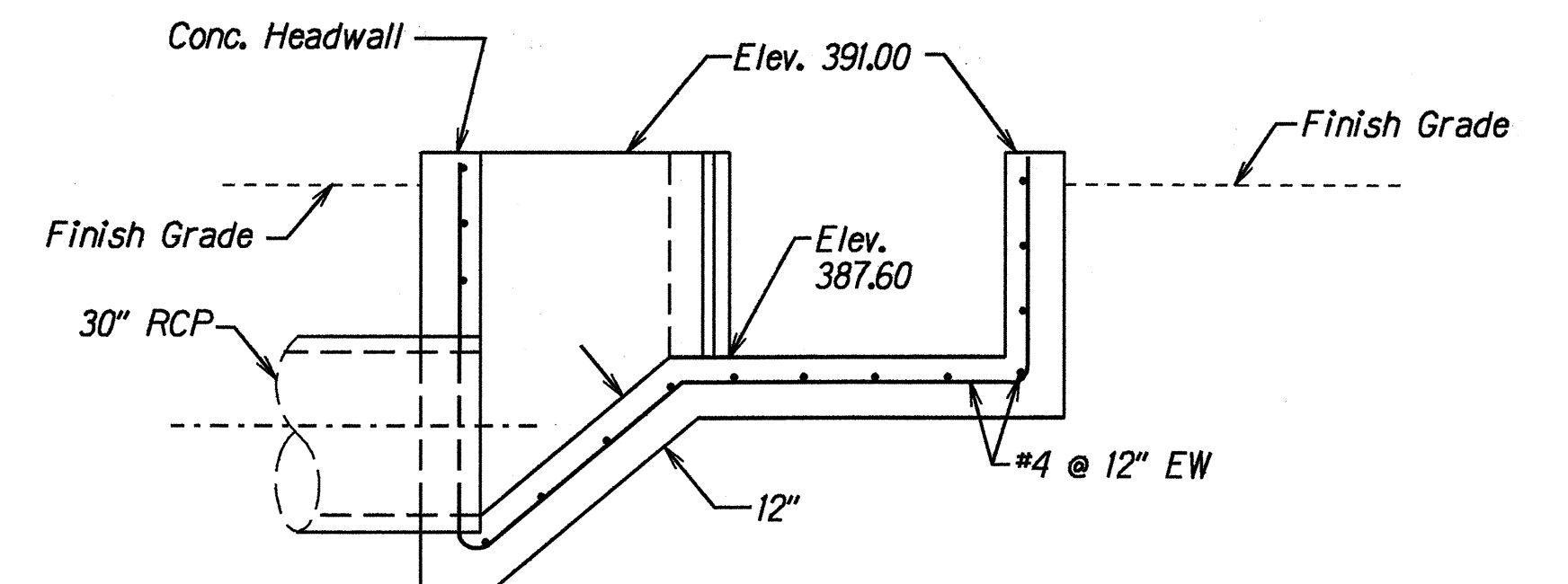
PLAN - HEADWALL STRUCTURE No. 1

Not To Scale



SECTION A-A

Not To Scale



SECTION B-B

Not To Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

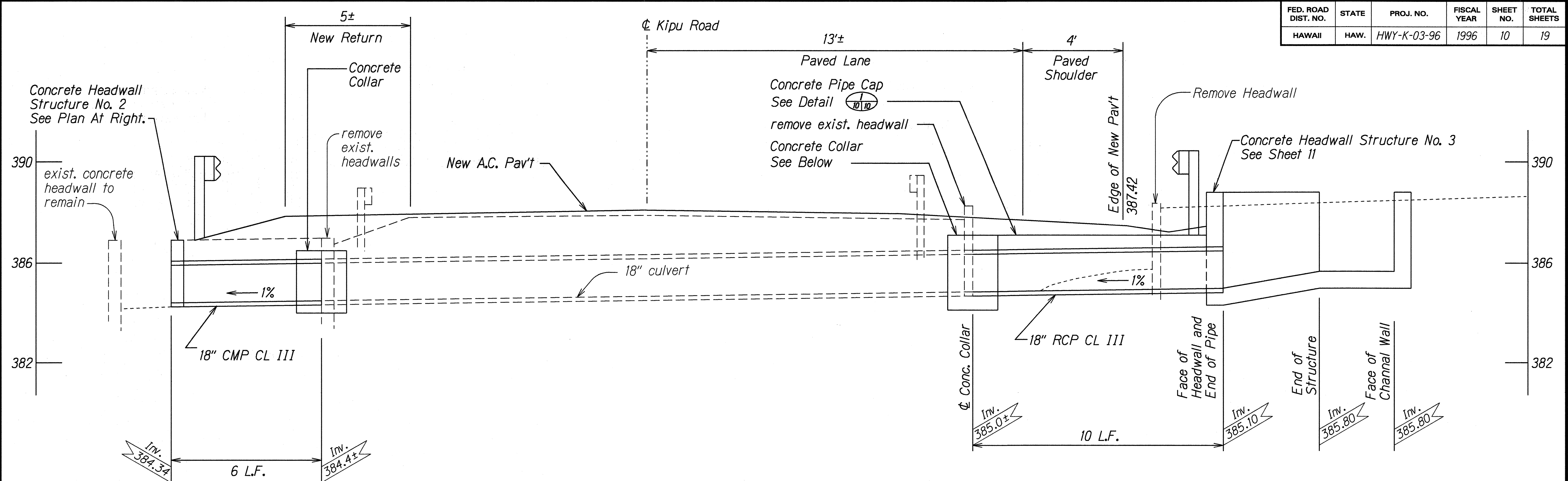
DETAILS

KAUMUALII HIGHWAY
PUHI TEMPORARY BYPASS ROAD
Project No. HWY-K-03-96

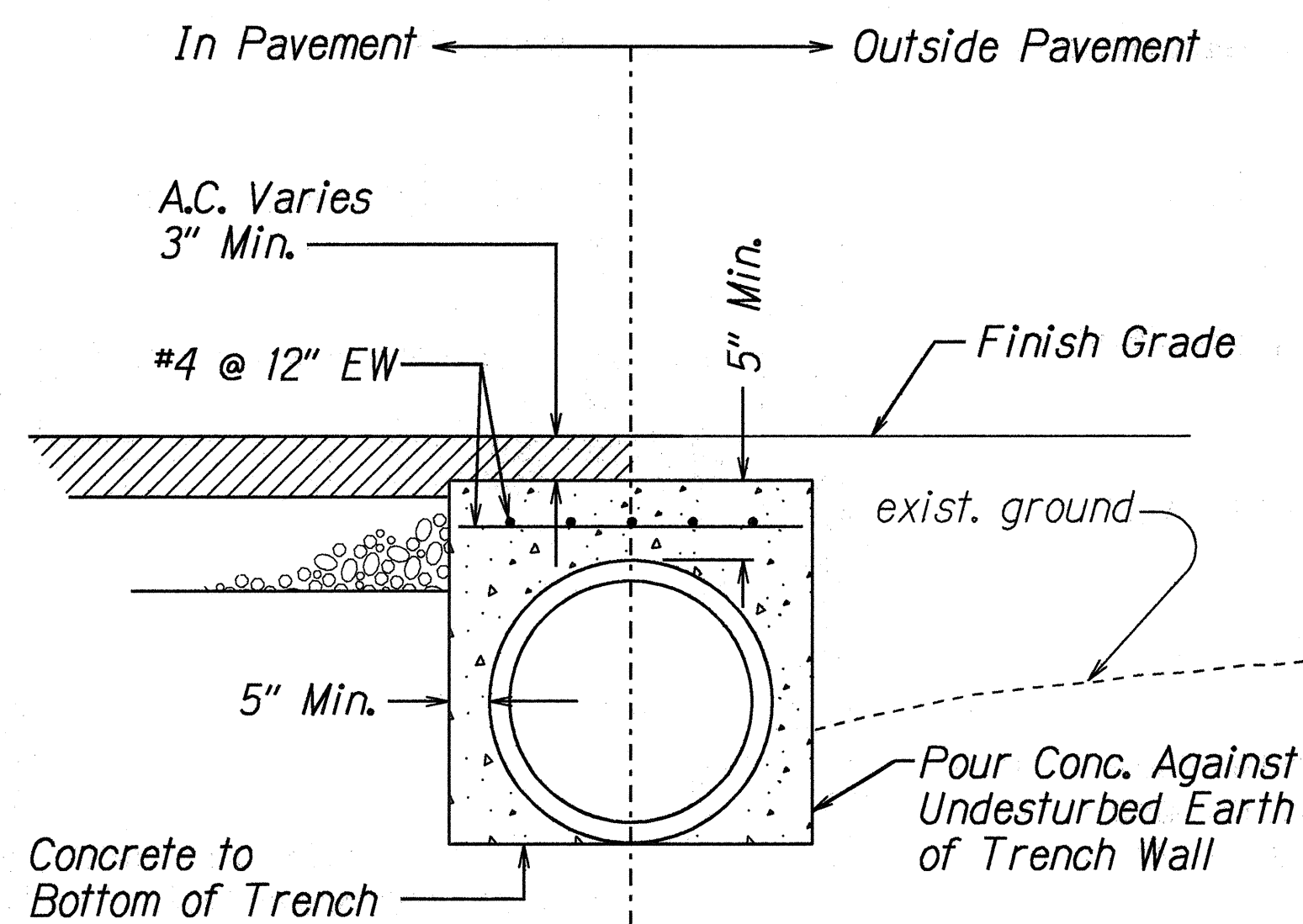
Scale: As Shown Date: Jan, 1996

SHEET No. 1 OF 4 SHEETS

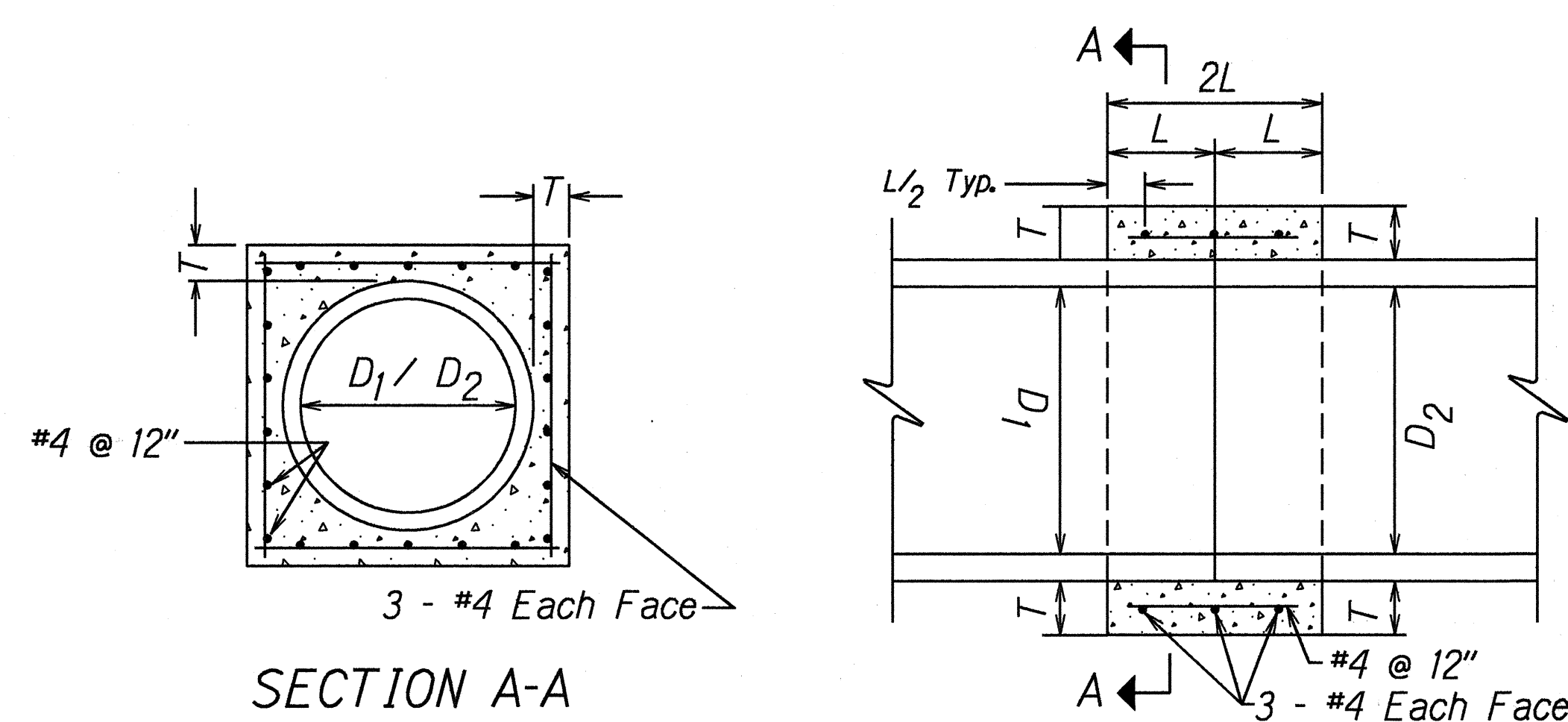
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-03-96	1996	10	19



PROFILE
18" CULVERT EXTENSIONS AT KIPU ROAD
 Scale: 1/2" = 1'

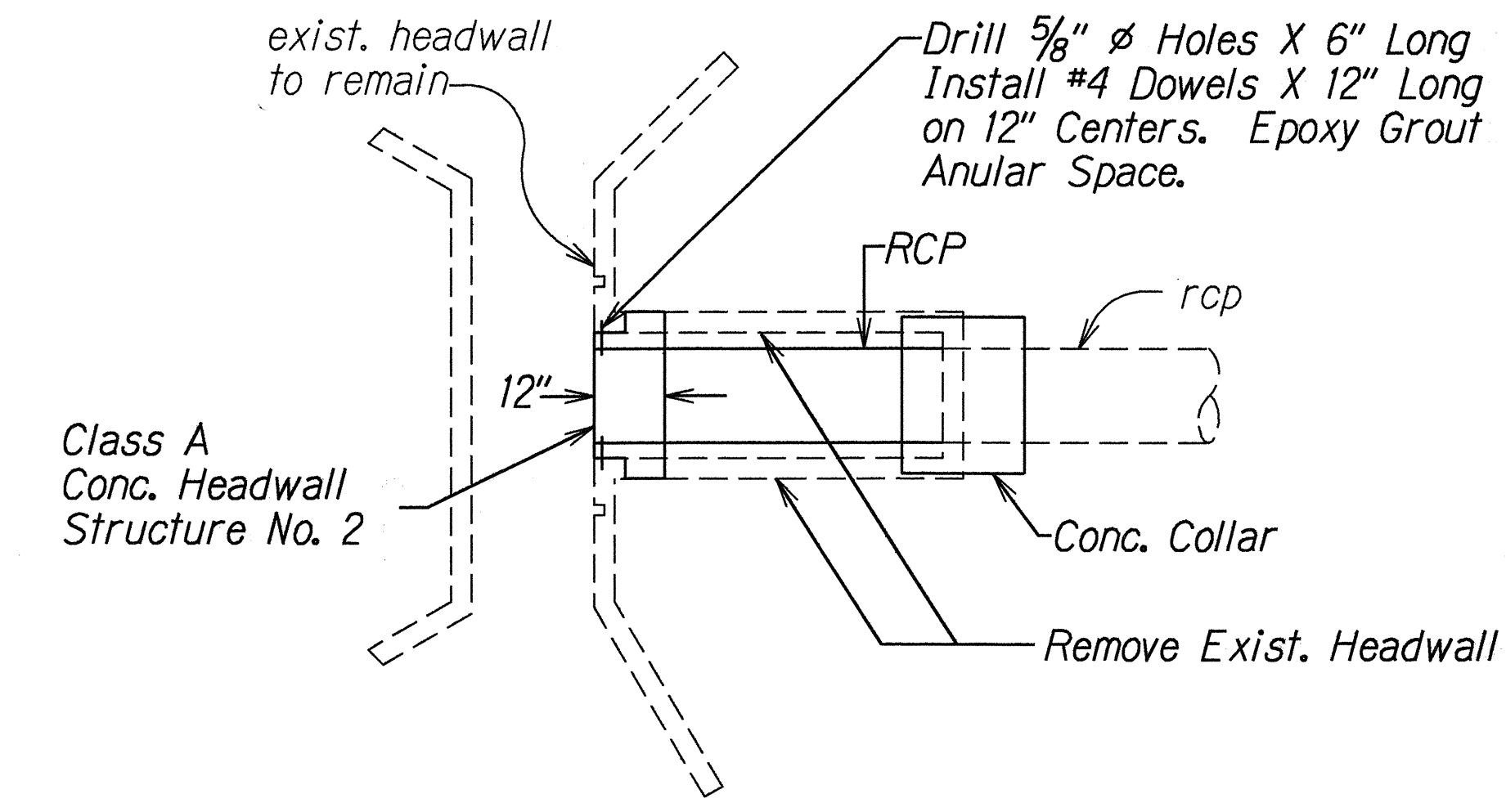


CONCRETE PIPE CAP DETAIL
 Not To Scale



CONCRETE COLLAR DETAIL
 Not To Scale

1. Where pipes of different diameters are joined with a concrete collar, L and T shall be those of the larger pipe D=D or D whichever is greater.
2. For pipes size not listed use next larger size
3. Join pipes at inverts.
4. Reinforcement shall be placed 1 1/2" clear from outside diameter of pipe.
5. Concrete collar shall be considered incidental to concrete pipe installation.



PLAN - HEADWALL STRUCTURE No. 2
 Not To Scale

D	L	T
12"	1.0'	4"
18"	1.0'	5"
24"	1.0'	6"
36"	1.5'	8"
48"	1.5'	10"
54"	1.5'	10"
60"	1.75'	11"
66"	1.75'	11"
72"	2.0'	12"

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DETAILS

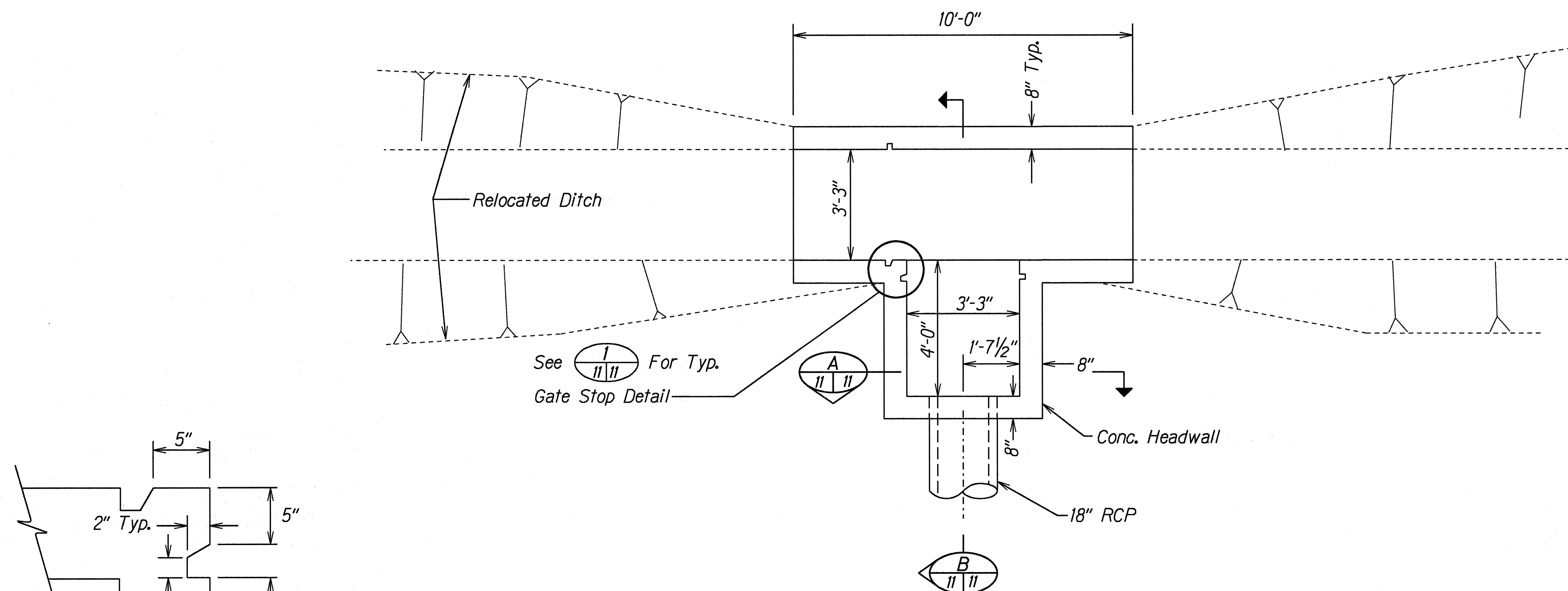
KAUMUALII HIGHWAY
 PUHI TEMPORARY BYPASS ROAD
 Proj. No. HWY-K-03-96

Scale: As Shown Date: Jan, 1996

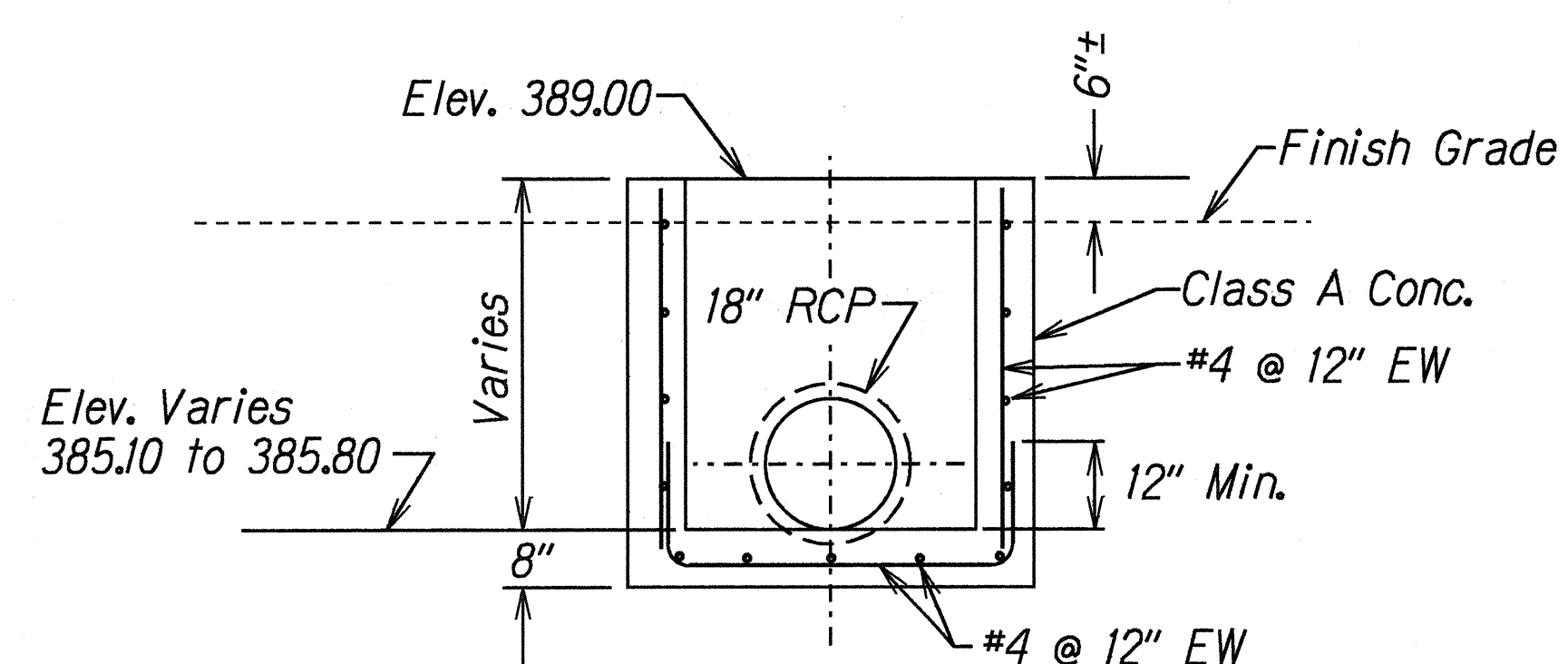
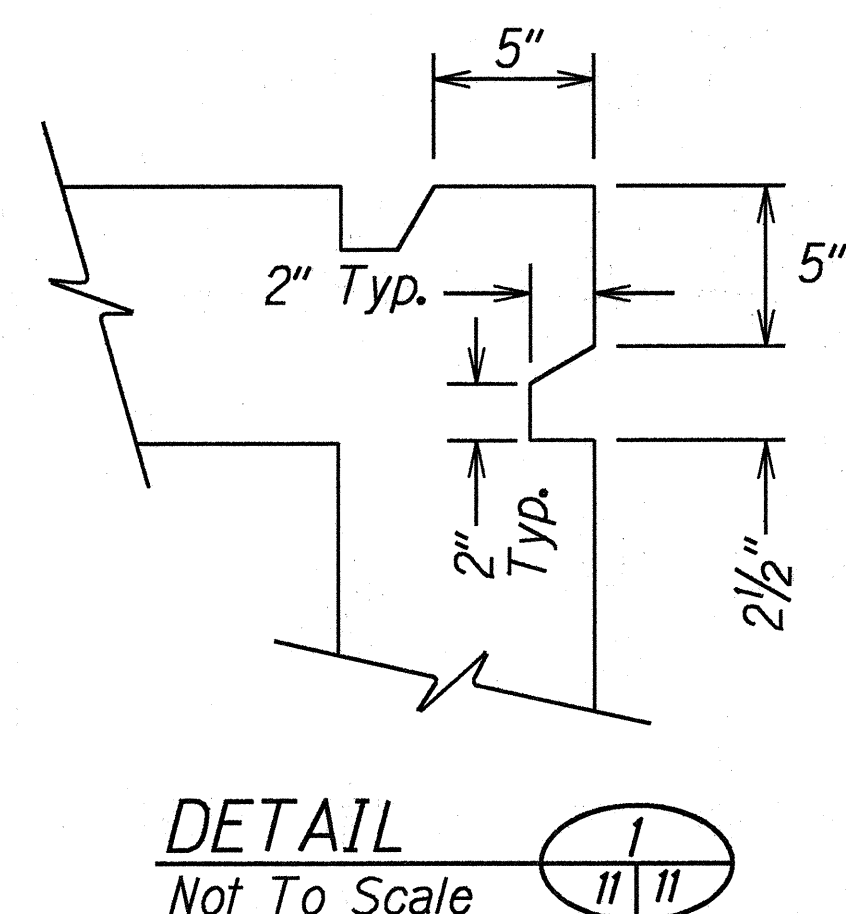
SHEET No. 2 OF 4 SHEETS

ORIGINAL PLAN
 SURVEY PLOTTED BY
 DRAWN BY
 TRACED BY
 CHECKED BY
 DATE
 NOTE: 1. gary
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 3. gary
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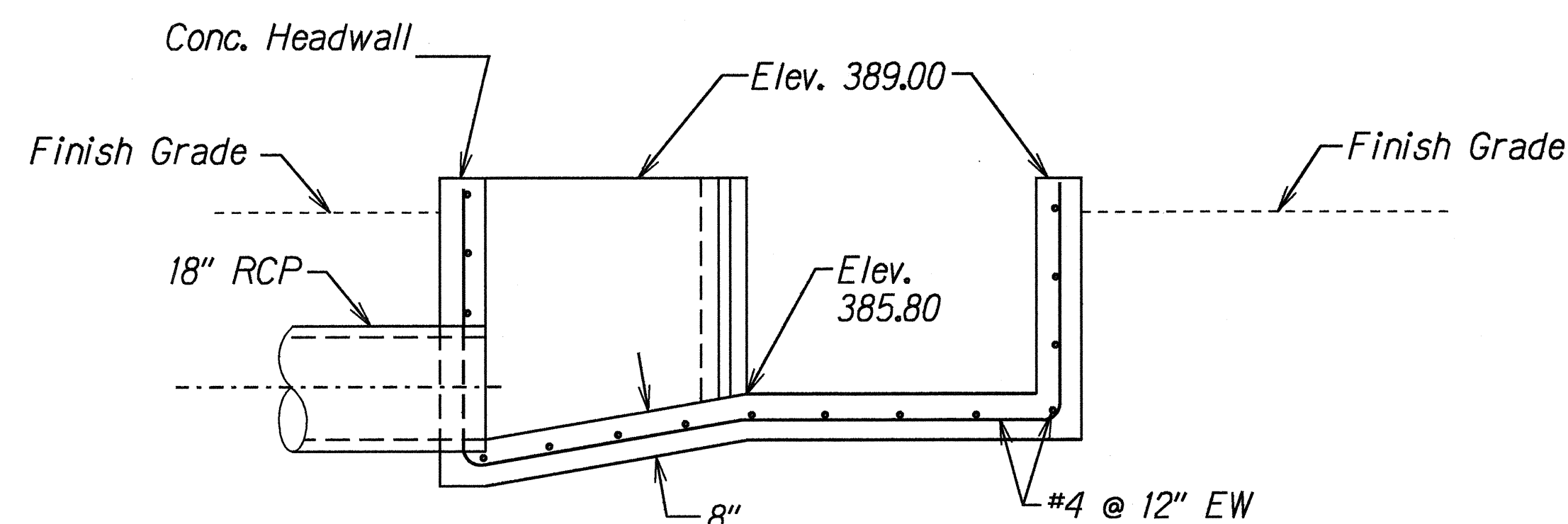
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-03-96	1996	11	19



PLAN - HEADWALL STRUCTURE No. 3
Scale: 1/2" = 1'-0"



SECTION A
Scale: 1/2" = 1'



SECTION B
Scale: 1/2" = 1'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
DESIGNED BY	CHECKED BY	
HWY-K		
Ke-2, gary		
Sakumasa3		

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

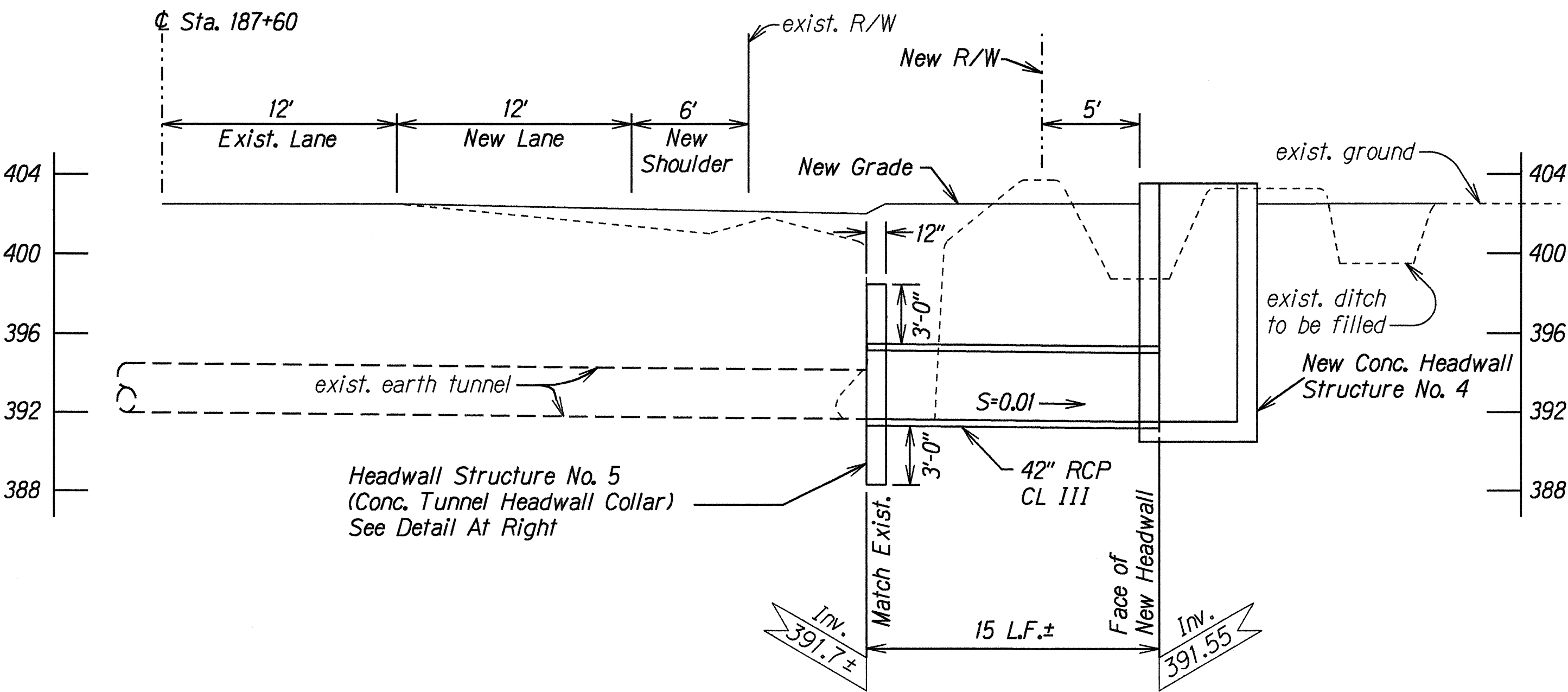
DETAILS

KAUMUALII HIGHWAY
PUHI TEMPORARY BYPASS ROAD
Proj. No. HWY-K-03-96

Scale: 1/2" = 1' Date: Jan, 1996

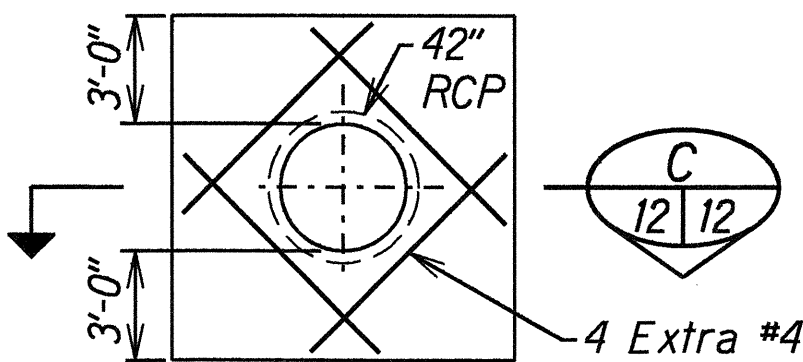
SHEET No. 3 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-K-03-96	1996	12	19



42" CULVERT TUNNEL EXTENSION @ STA. 187+60

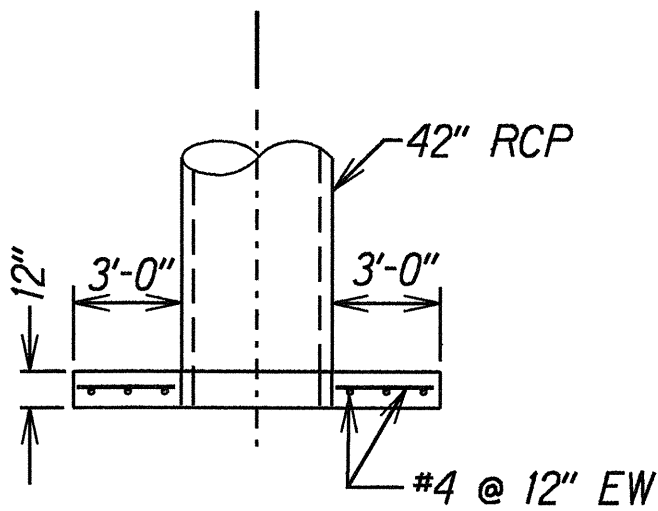
Scale: 3/16" = 1'



ELEVATION

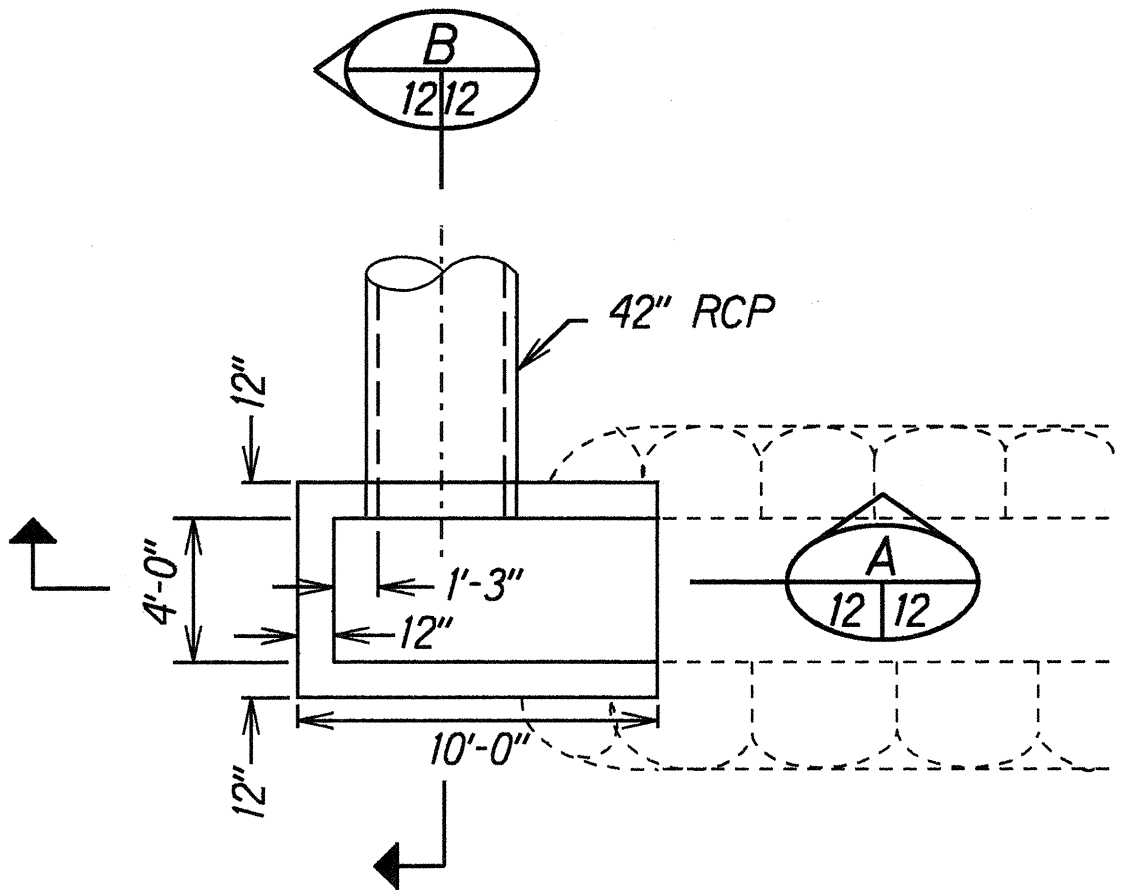
HEADWALL STRUCTURE NO. 5

Scale: 3/16" = 1'



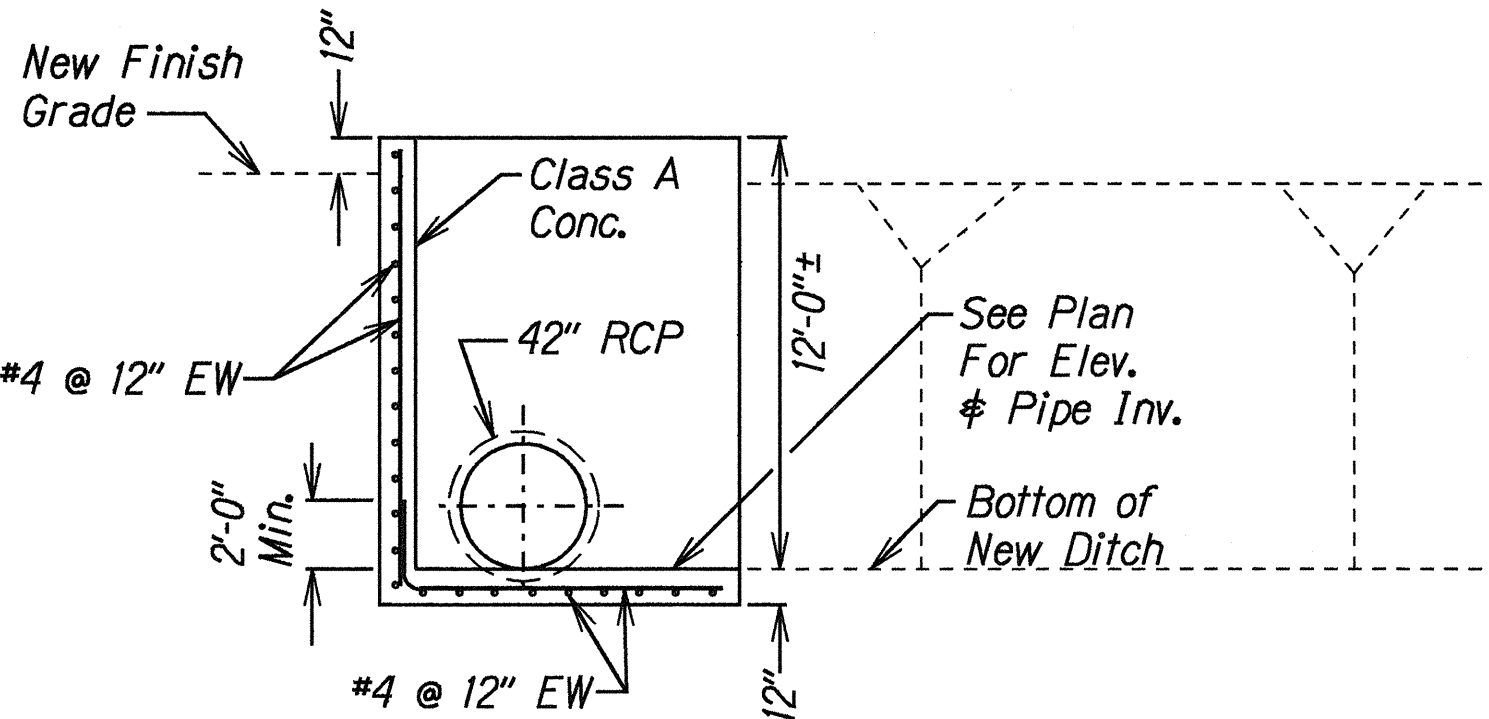
SECTION

Scale: 3/16" = 1'



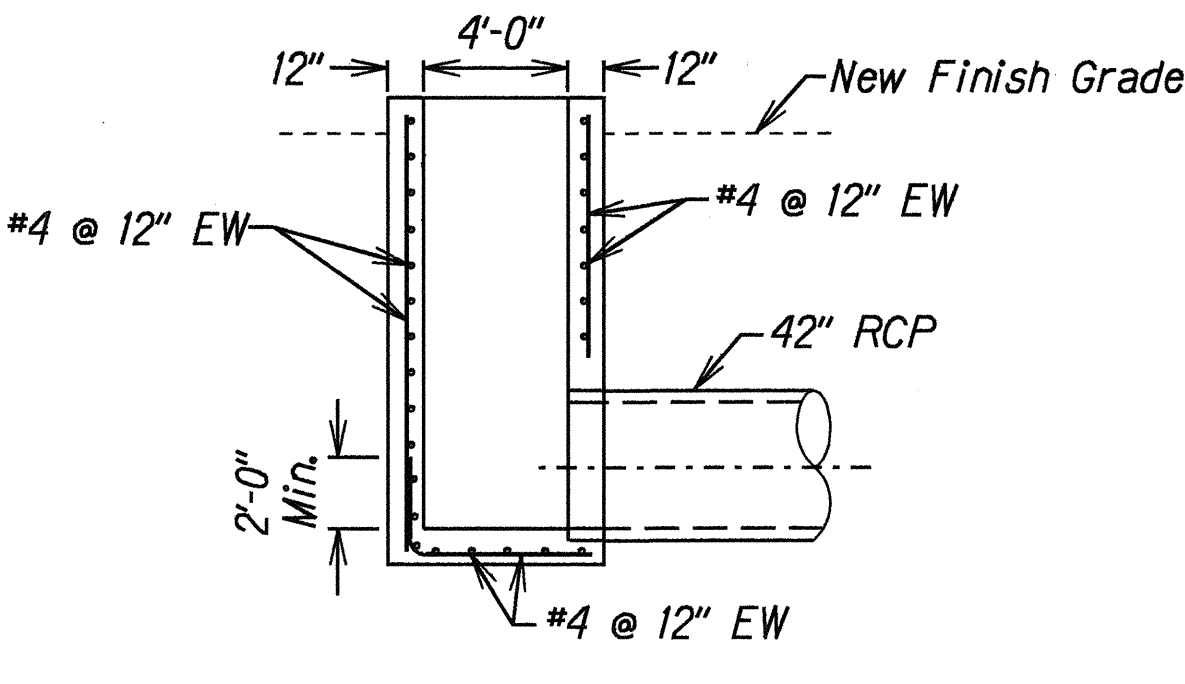
PLAN - HEADWALL STRUCTURE No. 4

Scale: 3/16" = 1'



SECTION

Scale: 3/16" = 1'



SECTION

Scale: 3/16" = 1'

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

DETAILS

KAUMUALII HIGHWAY

PUHI TEMPORARY BYPASS ROAD

Project No. HWY-K-03-96

Scale: 3/16" = 1' Date: Jan, 1996

SHEET No. 4 OF 4 SHEETS

12