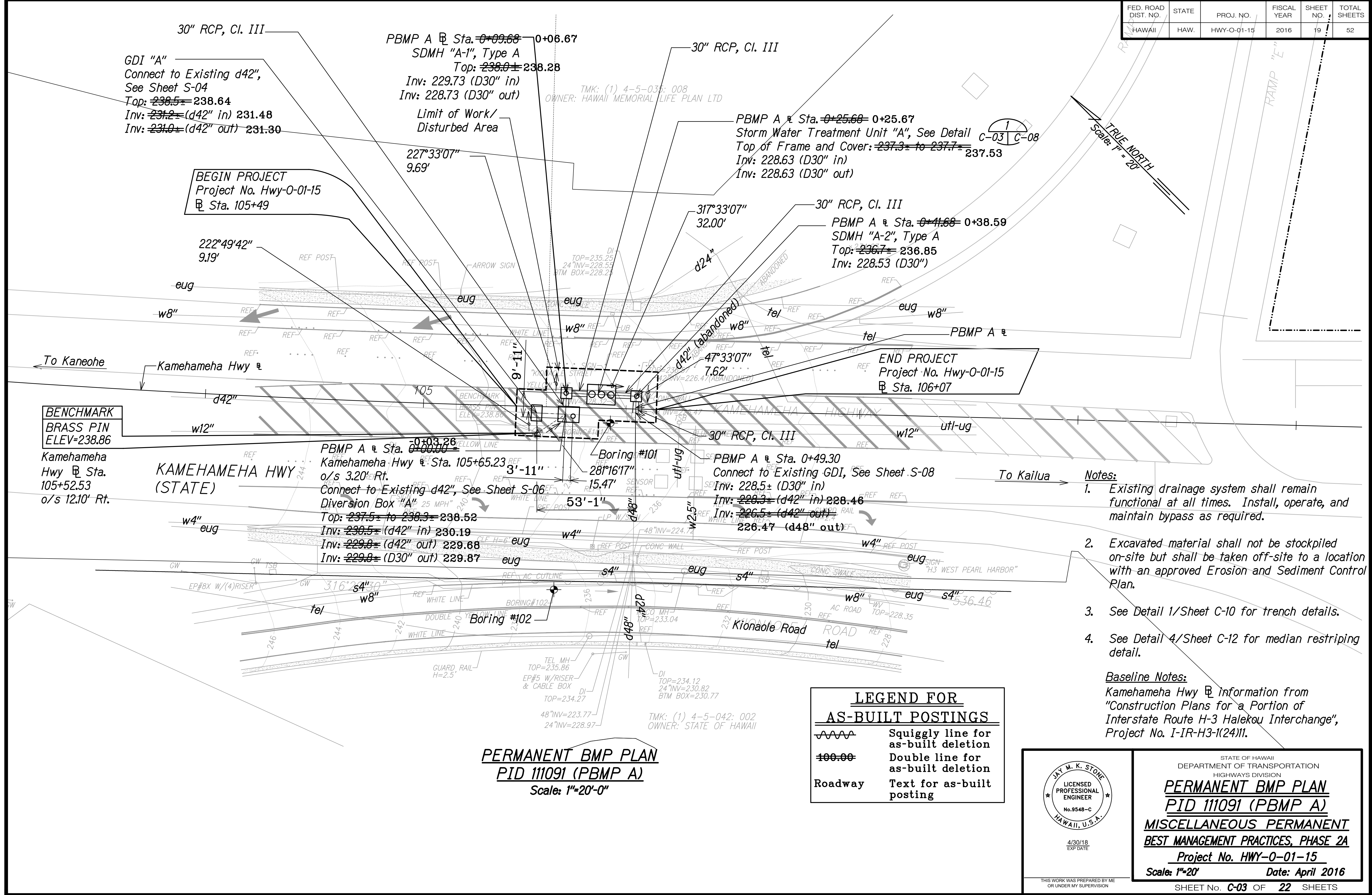
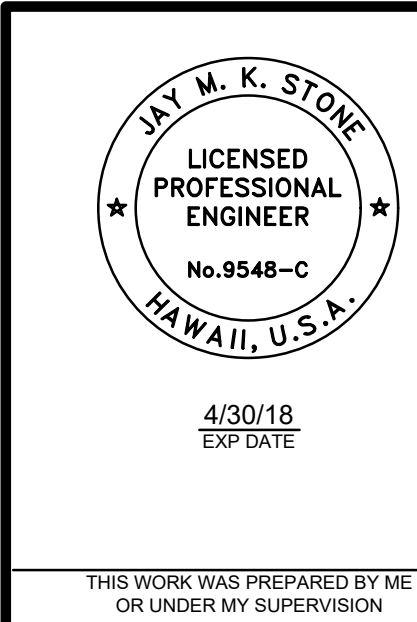


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-01-15	2016	19	52



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

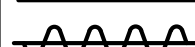
PERMANENT BMP PLAN
PID 111091 (PBMP A)
MISCELLANEOUS PERMANENT
BEST MANAGEMENT PRACTICES, PHASE 2A
Project No. HWY-O-01-15
Scale: 1"=20' Date: April 2016

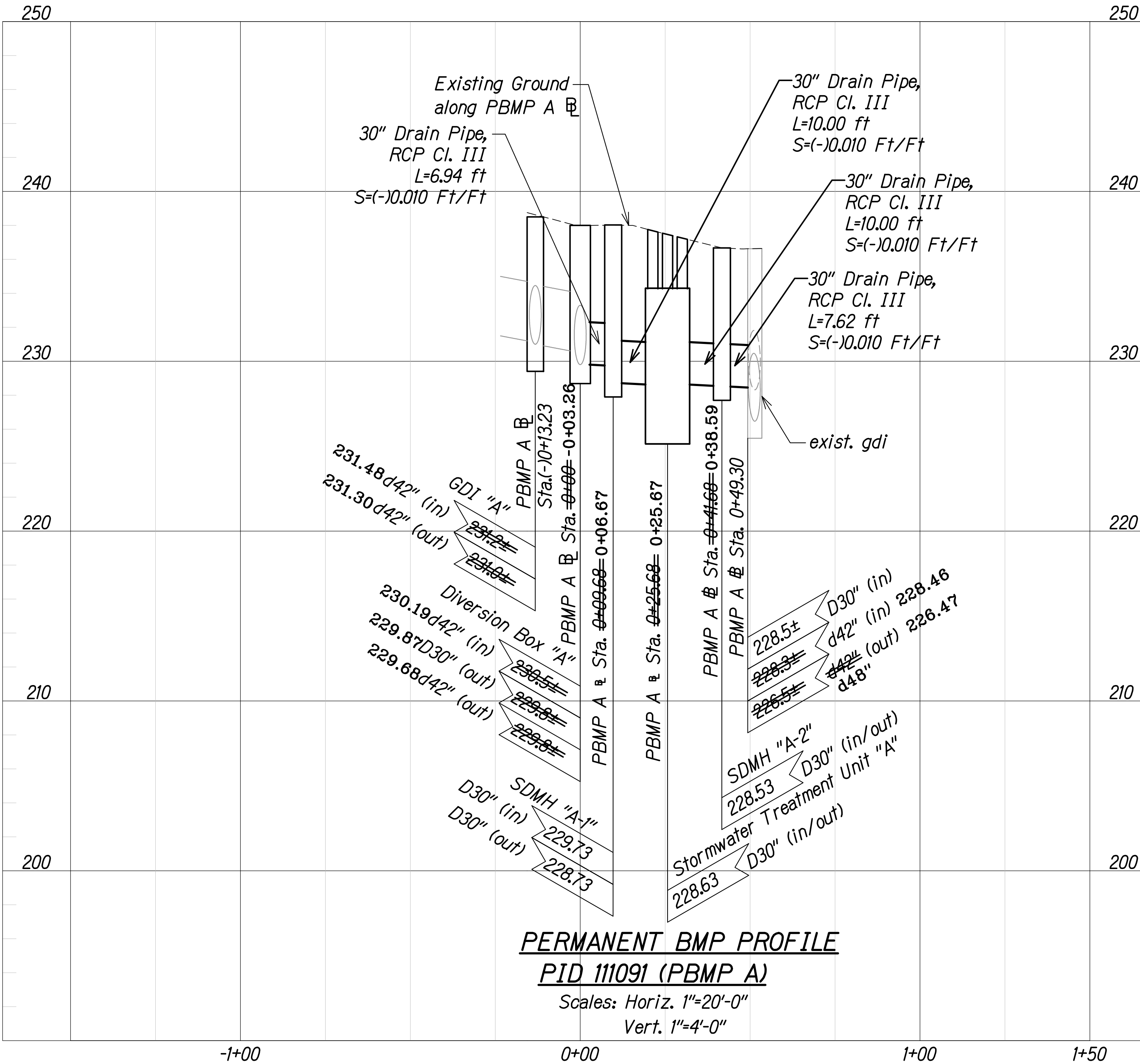
SHEET No. C-03 OF 22 SHEETS

"AS-BUILT"

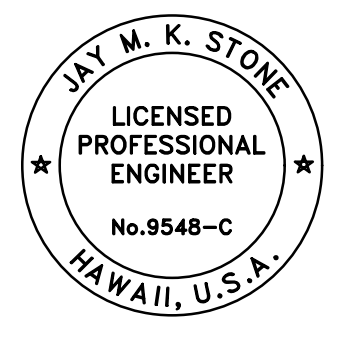
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-01-15	2016	20	52

**LEGEND FOR
AS-BUILT POSTINGS**

	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting



SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



4/30/18
EXP DATE

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PID 111091 (PBMP A) PROFILE

**MISCELLANEOUS PERMANENT
BEST MANAGEMENT PRACTICES, PHASE 2A**

Project No. HWY-O-01-15

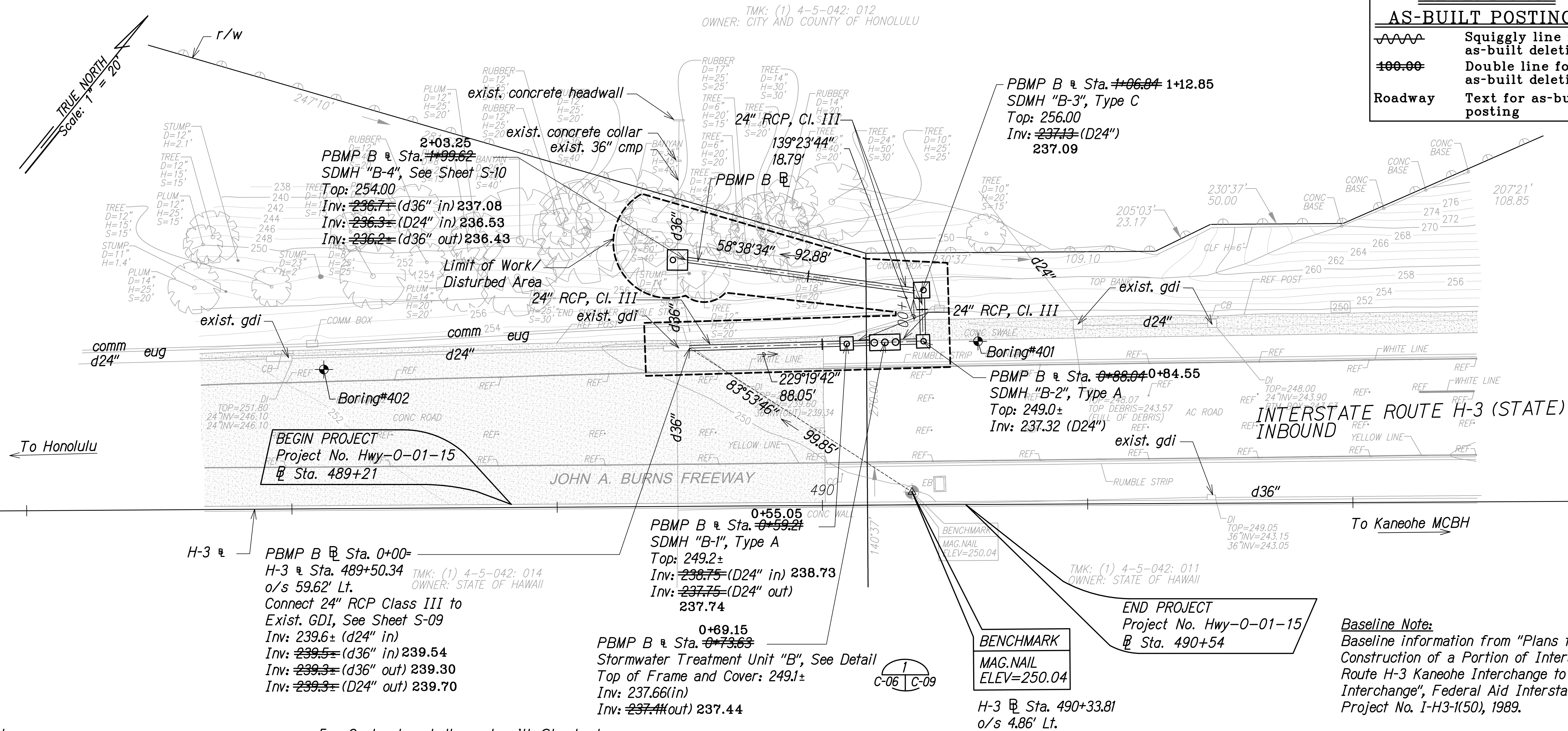
Scale: As Shown Date: April 2016

SHEET No. **C-04** OF **22** SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-01-15	2016	22	52

**LEGEND FOR
AS-BUILT POSTINGS**

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	Double line for as-built deletion
	Text for as-built posting



Notes:

- Existing drainage system shall remain functional at all times. Install, operate, and maintain bypass as required.
- Excavated material shall not be stockpiled on-site but shall be taken off-site to a location with an approved Erosion and Sediment Control Plan.
- See Sheets C-10 and C-11 for trench details.
- Restore pavement markings and striping to match exist. in accordance w/ Std. Plan TE-26 Divided Highway and Freeway.

- Contractor shall comply with Standard Specification 411.02(S) for P.C.C. pavement.
- Existing 6-inch diameter perforated underdrain pipe under existing shoulder not shown for clarity. Contractor to protect existing underdrain pipe during construction. Contractor shall replace damaged underdrain pipe at no additional cost to the satisfaction of the Engineer.

**PERMANENT BMP PLAN
PID 106997 (PBMP B)
Scale: 1\"=20'-0\"**

Baseline Note:
Baseline information from "Plans for Construction of a Portion of Interstate Route H-3 Kaneohe Interchange to Halekou Interchange", Federal Aid Interstate Project No. I-H3-I(50), 1989.

SURVEY PLOTTED BY	DATE
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ORIGINAL PLAN	
NOTE BOOK	
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HIGHWAYS DIVISION

**PERMANENT BMP PLAN
PID 106997 (PBMP B)**

**MISCELLANEOUS PERMANENT
BEST MANAGEMENT PRACTICES, PHASE 2A**

Project No. HWY-O-01-15

Scale: 1\"=20' **Date: April 2016**

SHEET No. **C-06** OF **22** SHEETS

"AS-BUILT"

22

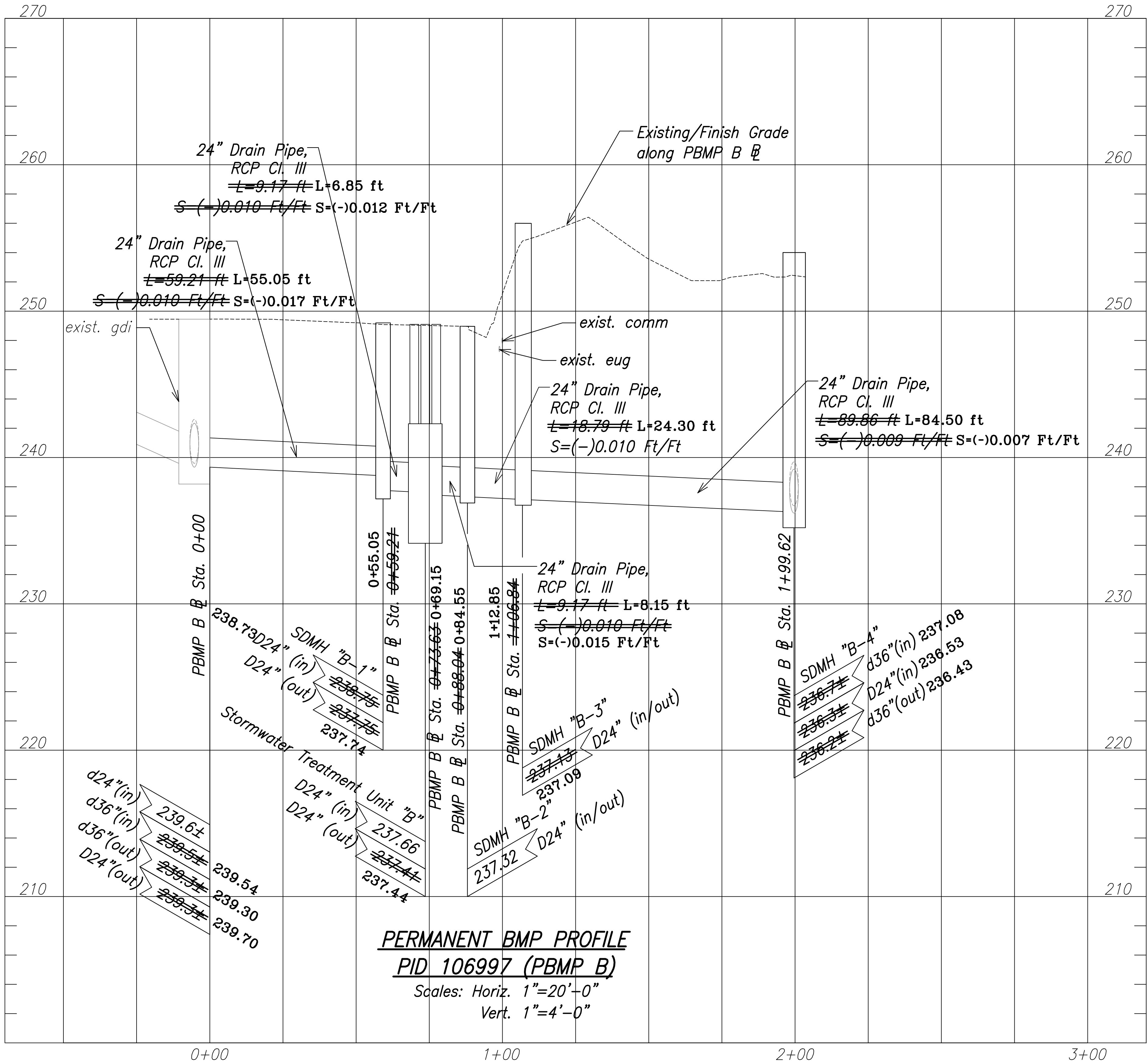
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-01-15	2016	23	52

LEGEND FOR
AS-BUILT POSTINGS

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Roadway Text for as-built posting



PERMANENT BMP PROFILE
PID 106997 (PBMP B)
Scales: Horiz. 1"=20'-0"
Vert. 1"=4'-0"

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
NOTE BOOK	No.	

JAY M. K. STONE
LICENSED PROFESSIONAL ENGINEER
No. 9548-C
HAWAII, U.S.A.
4/30/18
EXP. DATE

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PID 106997 (PBMP B) PROFILE

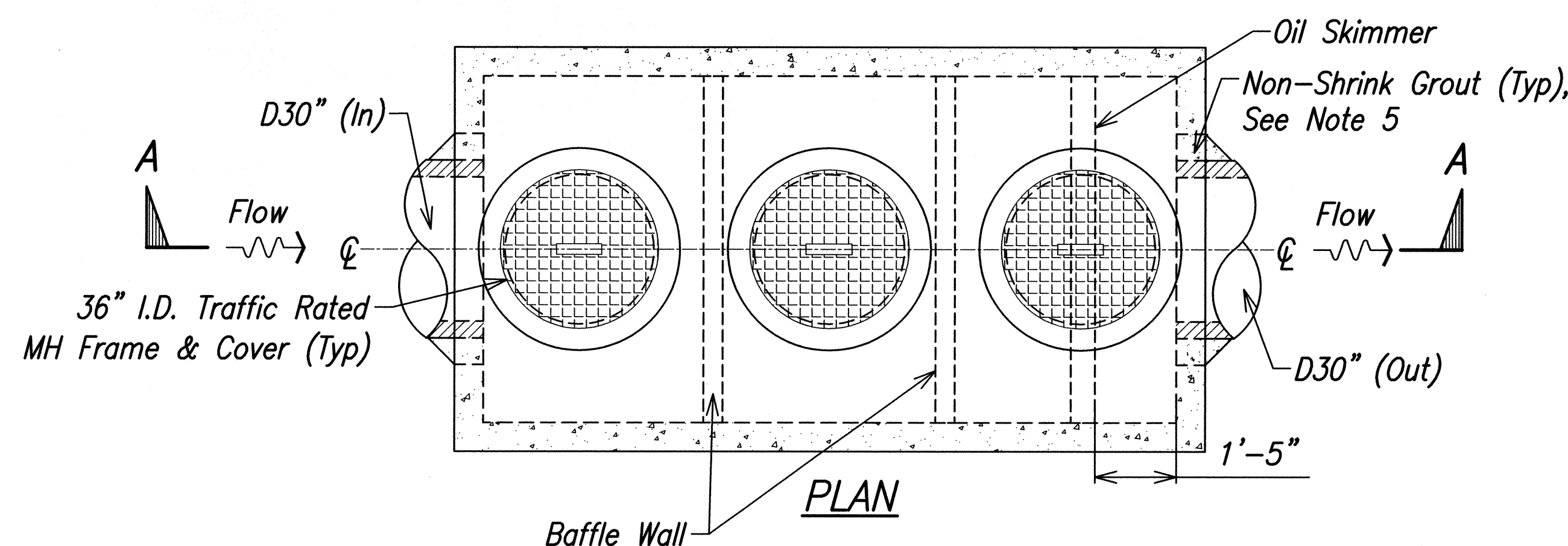
MISCELLANEOUS PERMANENT
BEST MANAGEMENT PRACTICES, PHASE 2A

Project No. HWY-O-01-15

Scale: As Shown Date: April 2016

SHEET No. C-07 OF 22 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-01-15	2016	24	52

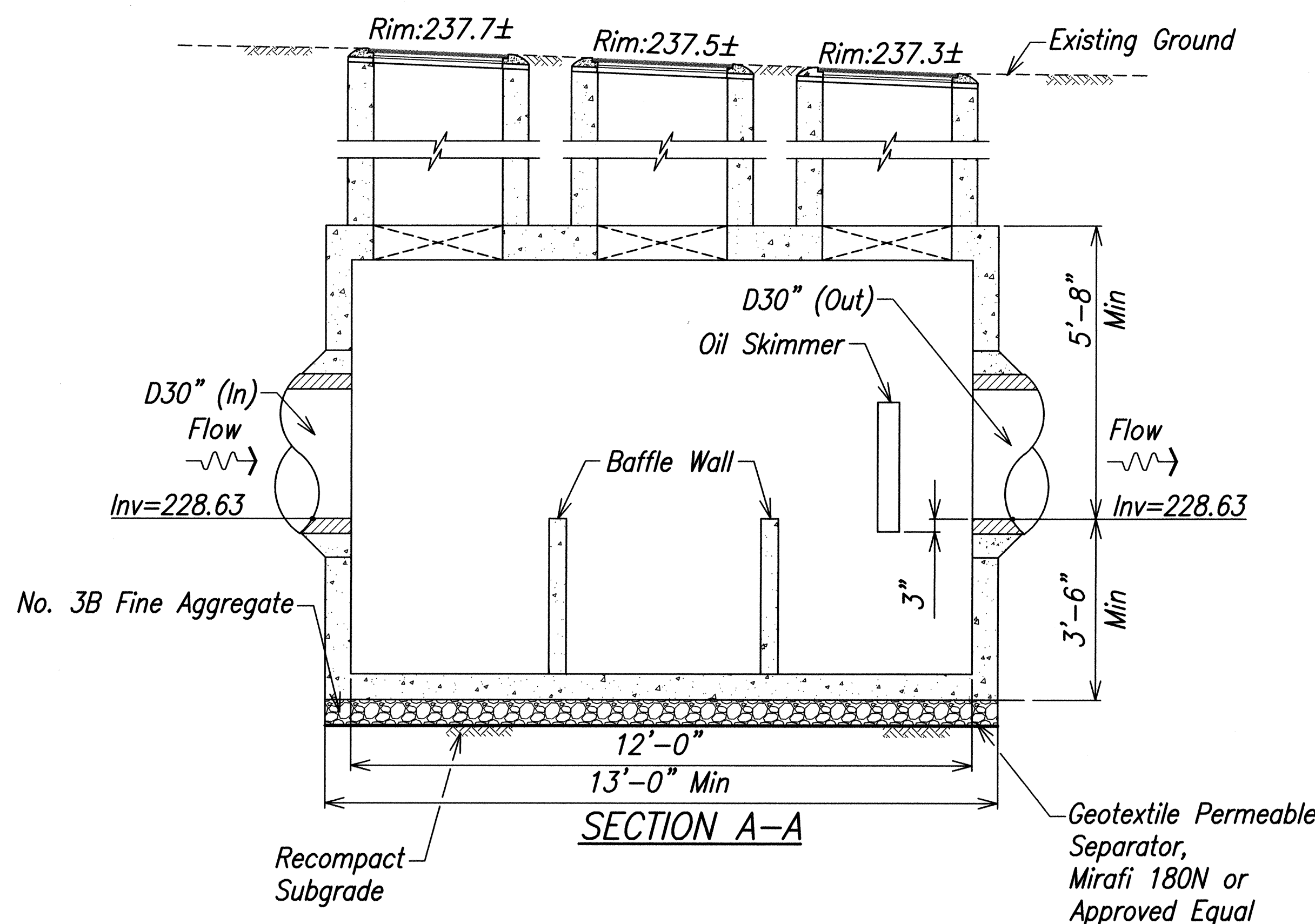
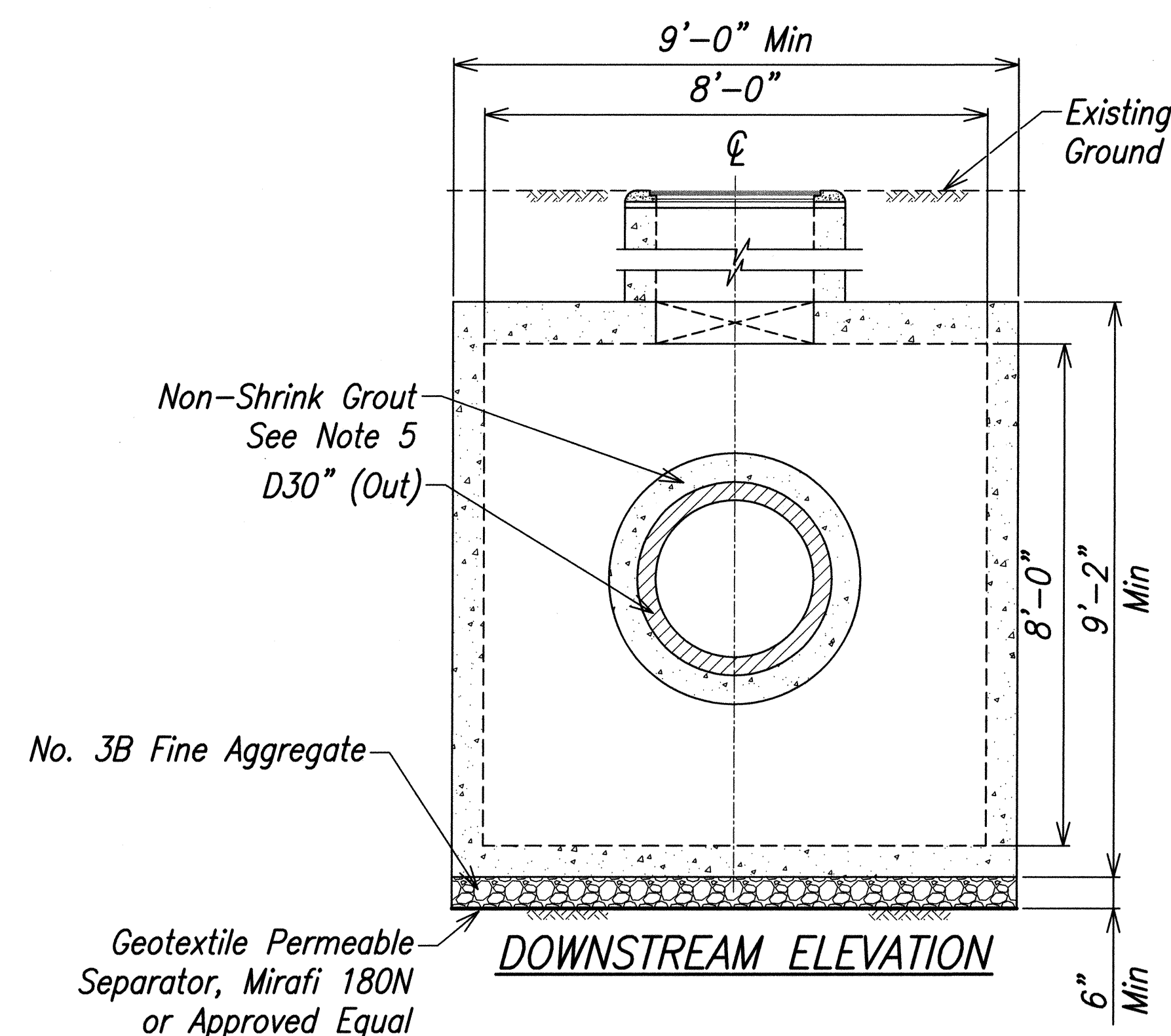


STORM WATER TREATMENT UNITS FLOW REQUIREMENTS

PID 111091 (UNIT A)	Q25 (cfs)	---
	WQFR (cfs)	7.02

Notes:

- Concrete 28-day compressive strength $f_c=5,000$ psi.
- Reinforcing: ASTM A-615, grade 60.
- Joint sealant: Butyl Rubber Mastic that meets requirements of AASHTO M-1998 and ASTM C-990.
- Invert of outflow must be 3" above the bottom of oil skimmer.
- All gaps around pipes shall be sealed watertight with non-shrink grout per manufacturer's installation instructions.
- The Contractor shall be completely responsible for the design and installation of the storm water treatment unit. Minimal components of the storm water treatment unit are shown on this sheet. The Contractor shall provide a complete functional system including all internal components and appurtenances, including but not limited to, turbulence deflectors, filtration screen with lid, oil skimmer, hydrocarbon boom, and baffle walls. The Contractor shall also be responsible for the design of the connection of the storm water treatment unit to new or existing drain lines.
- Inflow and outflow pipes shall be cut flush with the inside surface of the structure.
- Backfill around the walls of the SWTU shall conform to the requirements of structure backfill material A in Section 703.20 of the Standard Specifications. Backfill under water shall be open graded gravel No. 3B Fine. Compact backfill to between 90% and 95% relative compaction.



1
C-03 C-08 **STORM WATER TREATMENT UNIT "A" DETAIL**
Scale: 1/2"=1'-0"

DATE	_____
DESIGNED BY	_____
TRACED BY	_____
NOTE BOOK	_____
QUANTITIES BY	_____
CHECKED BY	_____
No.	_____

\\hawaii\share\civil\det highway\2013\00400_echu_miscellaneous\pmp\04_graphics\c03\Sheet\A\01 C-08 Treatment Unit Details (BMPs).A.dwg

	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
	STORM WATER TREATMENT UNITS DETAILS-1	
	MISCELLANEOUS PERMANENT BEST MANAGEMENT PRACTICES, PHASE 2A	
	Project No. HWY-0-01-15 Scale: 1/2"=1'-0"	Date: April 2016

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SHEET No. C-08 OF 22 SHEETS