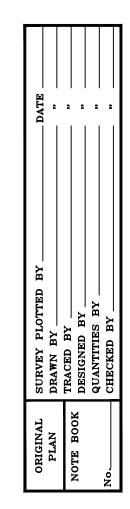
SWPPP Attachment A-1 BMP Maps Temporary Erosion Control Notes:

- Follow sequence of operation as recommended on pages 23 and 24 of the "Rules Relating to Soil Erosion Standards and Guidelines", April 1999, of the Department of Planning and Permitting, City \$ County of Honolulu.
- The Contractor shall minimize the amount of land to be exposed at any time.
- Exposed areas that are not at final grade and are 3. expected to be exposed for more than 30 days shall be covered with temporary vegetation or mulch (at a rate of 45 cubic feet per 1,000 square feet) in order to prevent erosion and silt runoff.
- Temporary Erosion Controls shall not be removed 4. before Permanent Erosion Controls are in place and established.
- Temporary construction access 12" thick with filter 5. fabric beneath shall be used for offsite vehicle sediment tracking at all construction entry and exit locations.
- Contractor to periodically inspect compost filter sock, 6. stabilized construction entrance, catch basin, and inlet filters especially during heavy rainfall. Contractor shall also ensure drainage through filter material is maintained.

z

- to prevent erosion of fill material.
- 8.
- completion of project.
- 11.

Catch basin protection	Catch basin ر کے Limits of Cor Harbor Acces
BOT. BOT. 70 60 70 80 70 80 70 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80 80	
IC 69:19 CONC. CURB IC 69:59 IC 70:72 IC 70:73 IC 70:73 IC 70:74	ПС 71,49 ПС 71,49 ВС 71,60 ВС 71,82 ВС 71,60 ВС 71,82 ВС 71,82 ВС 71,82 ВС 71,82 ВС 71,82 ПС 72,10 ВС 71,82 ПС 72,10 ВС 71,82 ПС 72,10 ВС 71,82 ПС 72,10 ВС 71,82 ПС 72,10 ВС 71,60 ВС 71,82 ПС 72,10 ВС 71,82 ПС 72,10 ВС 71,82 ПС 72,10 ВС 71,60 ПС 72,10 ВС 71,60 ВС 71,22 ПС 72,10 ВС 71,60 ПС 72,10 ВС 71,22 ПС 72,10 ВС 71,22 ВС 70,26 ВС 70,26 СС 70
Catch basin protection UNDER CONSTRUCTION)	40 TOP=68.99 ETRED AND UNDER CONSTRUCTION) 45 TC 70.58 BC 69.68 5X.5 12
	EROSION CON Scale: 1" = 40'



7. The final lift of each day's work shall be compacted

Good housekeeping shall be utilized to ensure protection of roadways from mud, dirt, and debris.

Any dirt or grassed area disturbed shall be restored by re-grassing the area or by seeded hydromulch. The grass shall be fully established at

At the end of grading operations and at the completion of project, Contractor shall inspect all catch basin, drain inlet and drain manhole surrounding the project site. Any accumulated sediment and debris found in the storm drain structures shall be removed. Please note that flushing into the drain structures are prohibited.

Sediment and Erosion Control BMP measures shown in the Contract Documents are minimum BMPs requirements and do not constitute an acceptable and/or complete Sediment and Erosion Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installation, Maintenance, Monitoring, and Removal of BMP.

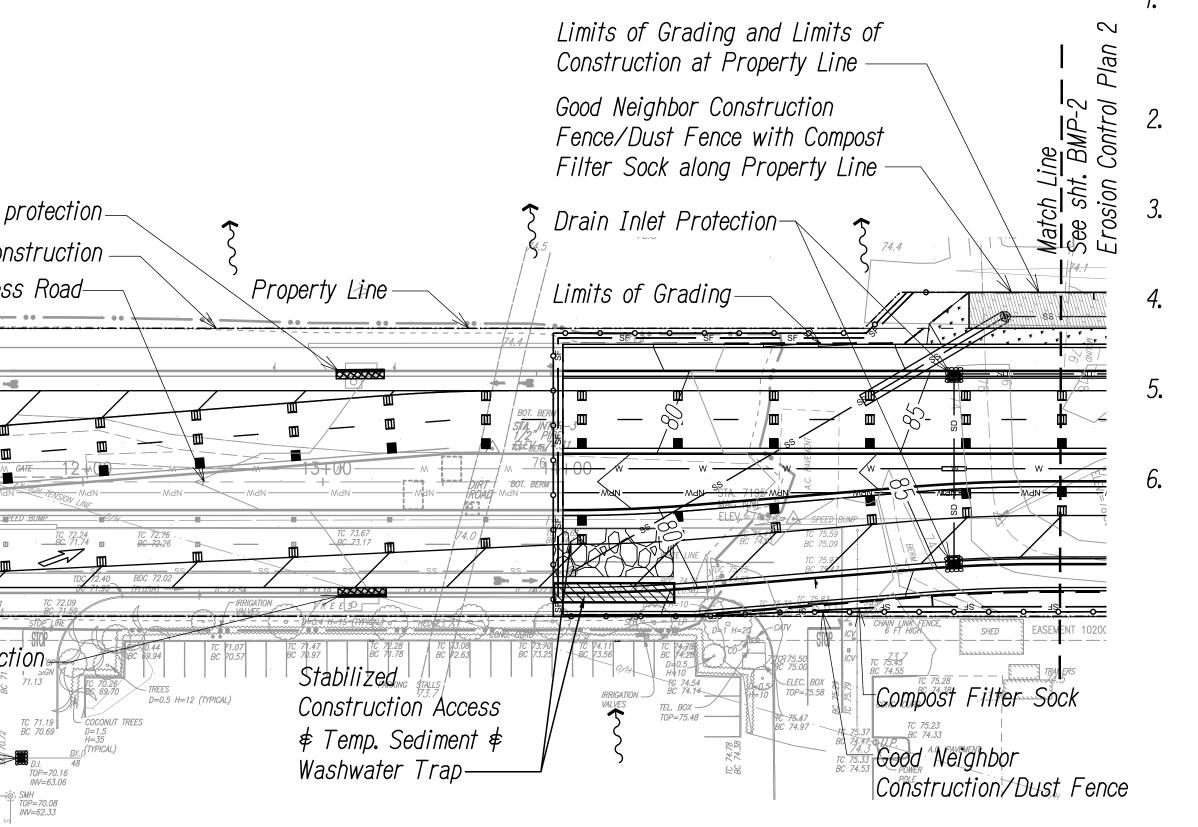
Permanent Erosion Control Measures:

- Hydroseed all slopes and exposed areas as soon as final grades have been established.
- 2:1 slopes shall be treated with geofabric or treated with soil conditioner to aid in the establishment of planting.

BMP Notes:

Sequence For Sediment Control:

- Install compost filter sock, stabilized construction access entry/exit, drain inlet protection, catch basin protection and washwater trap.
- 2. Commence grading operations.
- Ground cover, such as grassing and mulching to be installed immediately after final grades are established.



TROL PLAN 1

		FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS		
<u>Legend</u>		HAWAII	HAW.	NH-H1-1(271)	2022	64	167		
	Property I	Line							
	Limits of	Constructio	n						
	Limits of	Limits of Grading & Disturbed Area							
— — — 570 — — —	Finish Gr	Finish Grade Contour							
— — — 570 — — —	Exist. Gra	Exist. Grade Contour							
SF SF	Compost F	Compost Filter Sock, See Det. 02/BMP-6							
-000	Good Neighbor Construction/Dust Fence, See Det. 06/BMP-6								
	Straw Wattle, See Det. 01/BMP-5								
SD SD	Drain Line								
	Stabilized	Stabilized Construction Access, See Det. 01/BMP-6							
	Grassed Area								
~ ~~	Flow Arro)W							
	Drain Inl	et							
	Drain Inl	et Protectic	n, See	Det. 04/BMP-	6				
	Catch Ba	sin Protecti	on, See	e Det. 03/BMP	-6				

Temporary Erosion Control Measures:

Temporary Erosion Control measures, as reflected on plan, shall be installed prior to clearing land for grading with the exception of filters for catch basins and drain inlets to be constructed.

Construction access shall be established prior to clearing operations. construction access shall be 12" thick, 20' wide and 50' long, minimum.

Opening and clearing of land for grading shall be performed incrementally to minimize erosion potential.

Areas not within the limits of grading shall remain vegetated during grading operations.

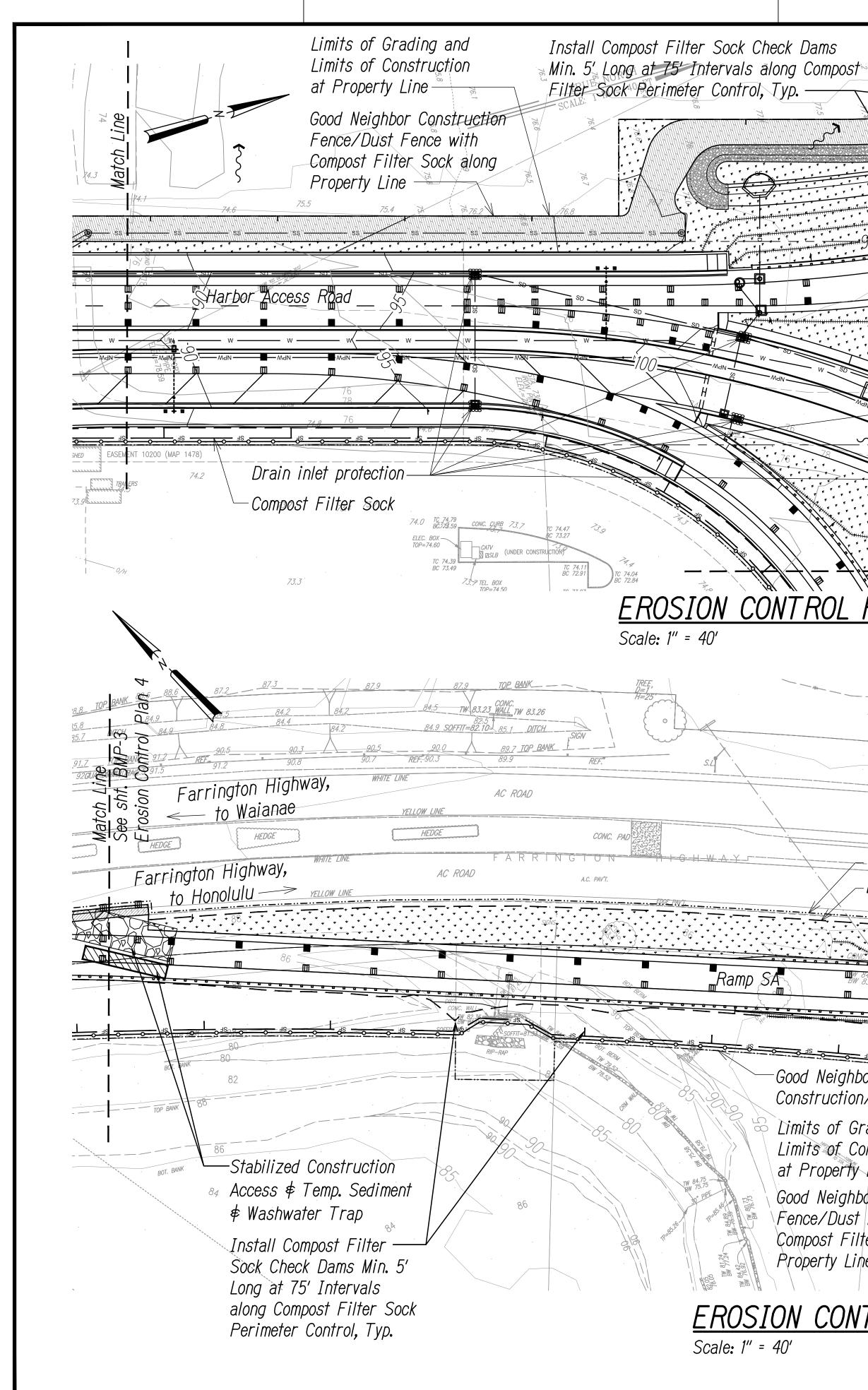
When cleared or grubbed areas are not to be graded or disturbed for 30 days or more, the Contractor shall cover with temporary vegetation or mulch.

The Contractor's equipment storage areas shall be protected through the use of compost filter socks and spill kits to prevent pollutants from discharging into state waters. the contractor shall inspect and maintain storage areas.

<u>Graphic Scale</u>

40' 20' 0 80' 1'' = 40'

This work was prepared by			
EROSION CONTROL PLAN 1 INTERSTATE ROUTE H-1	HISTOPHER H. OF	DEPARTMENT	OF TRANSPORTATION
INTERSTATE ROUTE H-1	* ENGINEER * No. 12144-C	EROSION (CONTROL PLAN 1
	4WA11, U.S.		
me or under my supervision ADDITION AND MODIFICATION OF FREEWAT ACCESS (Kapolei Interchange Complex), Phase 3	me or under my supervision	(Kapolei Intercha	ange Complex), Phase 3
Chine Ball Federal Aid Project No. NH-H1-1(271)	Christ Ball	<u>Federal Aid Pl</u>	<u>roject No. NH-H1-1(271)</u>
MITSUNAGA & ASSOCIATES, INC. EXP. DATE Scale: As Noted Date: August 2022		Scale: As Noted	Date: August 2022
NOTE: Contractor to check and verify dimensions at job before proceeding with work.		SHEET No.B	MP-1OF 167 SHEETS
64			64



.

PLOTT BY _____ BY ____ BY ____ TIES BY ____

SURVEY DRAWN TRACED DESIGNE QUANTIT

ORIGINAL PLAN NOTE BOOK

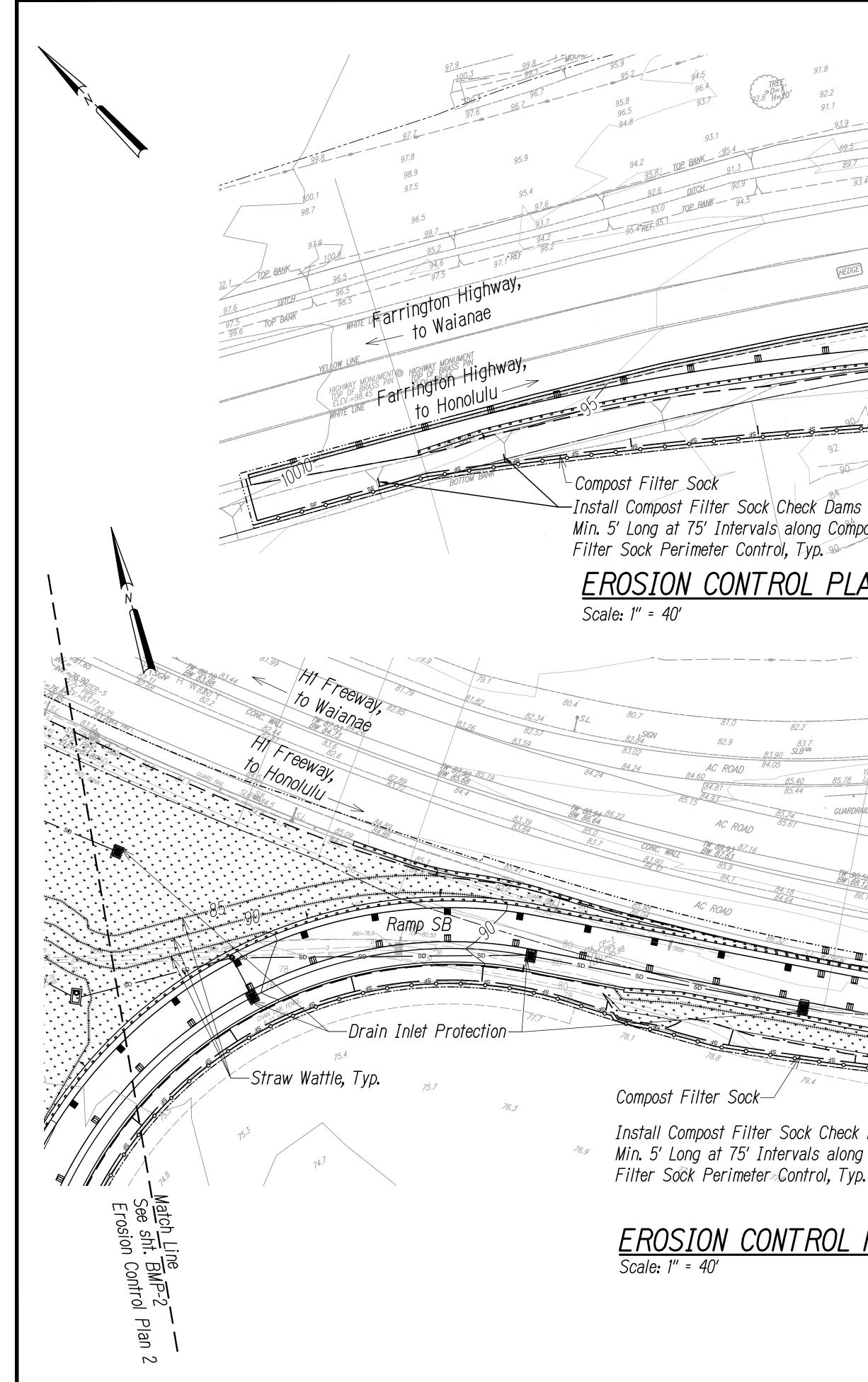
<u>L e </u> -Install Compost Filter Sock In Front of Riser Opening Match Line See sht. BMP-3 Erosion Control Plan 5 EROSION CONTROL PLAN 2 -Straw Wattle, Typ. 80.2 81.6 83.6 81.3 <u>84.54 84.3</u>1 WHITE LINE <u>82.93</u> SLB 🖻 81.9" REF. Farrington Highway, YELLOW LINE -Limits of BCONStruction -Limits of Grading CONC. WALT Farrington Highway, to Honolulu ____ Ramp SA Good Neighbor Construction/Dust Fence Limits of Grading and Limits of Construction at Property Line-Good Neighbor Construction Fence/Dust Fence with Compost Filter Sock along Property Line-Install Compost Filter Sock EROSION CONTROL PLAN 3 In Front of Riser Opening Scale: 1" = 40'

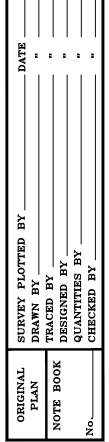
		FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS				
<u>gend</u>		HAWAII	HAW.	NH-H1-1(271)	2022	65	167				
	Property L	ine									
	Limits of (Limits of Construction									
	Limits of (Limits of Grading & Disturbed Area									
570	Finish Gra	de Contour	-								
570	Exist. Grad	de Contour									
SF SF	Compost Fi	ilter Sock,	See De	et. 02/BMP-6							
-oo	Good Neigh	nbor Constr	uction,	/Dust Fence, S	See Det.	06/BN	1P-6				
	Straw Wat	tle, See De	t. 01/B	MP-5							
SD SD	Drain Line										
	Stabilized	Stabilized Construction Access, See Det. 01/BMP-6									
	Grassed A	Grassed Area									
~ ~~	Flow Arrow	N									
	Drain Inle	†									
	Drain Inle	t Protectio	n, See	Det. 04/BMP-0	6						
	Catch Bas	in Protecti	on, See	e Det. 03/BMP	-6						
	<u>Note:</u>										
F. 82.20	the C and C Sedir addit consi accor applie	Contract Do do not cons ment Contro tional BMPs dering site dance with cable permi	ocument stitute ol Plan s based e condi n the C it docu f Item	Control BMP s are minimum an acceptable The Contract upon their m tions and cons ontract Docum ment requirem 209.0100, Insta	n BMP I and/or or shall peans ar struction pents inc ents. Co	require comple incorp nd meth seque cluding ost shal	ments ete porate pods ence in II be				

Monitoring, and Removal of BMP.



	<u>Graphic Scale</u>
	1'' = 40' 40' 20' 0 40' 80'
24STOPHER AND DE LICENSED	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
* ENGINEER *	EROSION CONTROL PLAN 2
This work was prepared by me or under my supervision	INTERSTATE ROUTE H-1 ADDITION AND MODIFICATION OF FREEWAY ACCESS
CHINT BALL 4/30/2024 ITSUNAGA & ASSOCIATES, INC. EXP. DATE	(Kapolei Interchange Complex), Phase 3Federal Aid Project No. NH-H1-1(271)Scale: As NotedDate: August 2022
TSUNAGA & ASSOCIATES, INC. EAP. DATE OTE: Contractor to check and verify nensions at job before proceeding with work.	SHEET NO.BMP-20F 167 SHEETS
	65





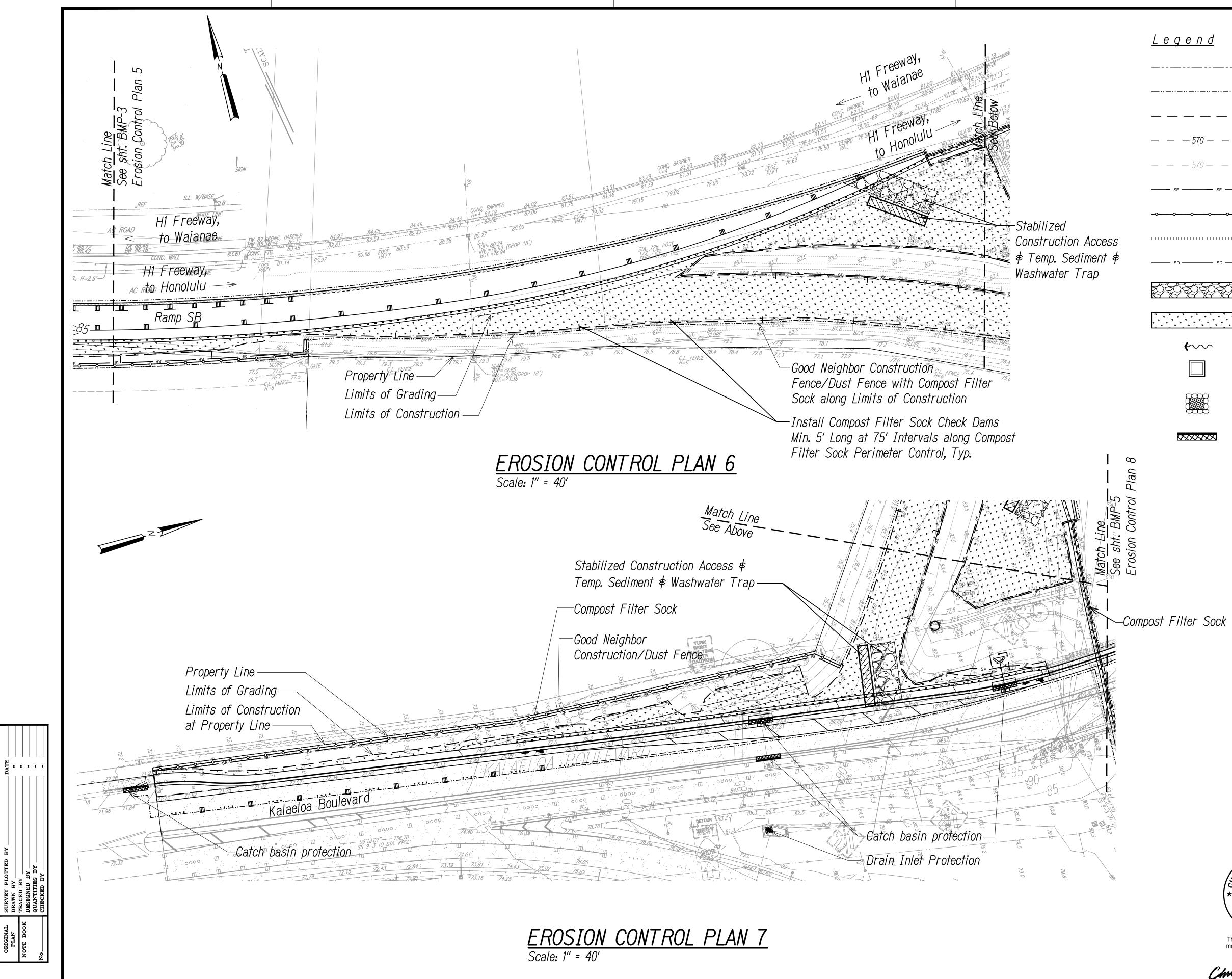
Le ____ TON I 2 m See Ero HEDGE -Stabilized Construction Access 📻 🕏 Temp. Sediment 🕏 Property Line-Washwater Trap -Limits of Grading Limits of Construction at Property Line Min. 5' Long at 75' Intervals along Compost Filter Sock Perimeter Control, Typ. -Good Neighbor DOT. B Construction/Dust Fence EROSION CONTROL PLAN 4 9 INV=79.7 83.7 SLB ⊠ BMP IC ROAD <u>Match Li</u> See sht. Erosion GUARDRAIL, H=2.5 AC ROAD UTILITY BOX • TOP=83.54 H1 Freeway, <--- to Waianae HI Freeway, GUARDRAIL, H=2. to Honolulu —> Good Neighbor Install Compost Filter Sock Check Dams Construction/Dust Fence Min. 5' Long at 75' Intervals along Compost Property Line-Filter Sock Perimeter Sontrol, Typ. --Limits of Grading Limits of Construction EROSION CONTROL PLAN 5 at Property Line

		FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS			
<u>gend</u>		HAWAII	HAW.	NH-H1-1(271)	2022	66	167			
	Property L	ine								
	Limits of (Constructio	n							
	Limits of Grading & Disturbed Area									
570	Finish Grade Contour									
570	Exist. Grad	Exist. Grade Contour								
SF SF	Compost Filter Sock, See Det. 02/BMP-6									
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Good Neighbor Construction/Dust Fence, See Det. 06/BMP-6									
	Straw Wattle, See Det. 01/BMP-5									
SD SD	Drain Line	Drain Line								
	Stabilized	Stabilized Construction Access, See Det. 01/BMP-6								
	Grassed A	rea								
<b>~</b> ~~	Flow Arrow	N								
	Drain Inle	†								
	Drain Inle	t Protectio	n, See	Det. 04/BMP-0	6					
	Catch Bas	in Protecti	on, See	e Det. 03/BMP	-6					
	<u>Note:</u>									

Sediment and Erosion Control BMP measures shown in the Contract Documents are minimum BMP requirements and do not constitute an acceptable and/or complete Sediment Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installlation, Maintenance, Monitoring, and Removal of BMP.

	1'' = 40'	40' 20'	0 4	40'	80'
RESTOPHER AT OF	DEPA	STAT RTMENT ( HIGHW		SPORTA	ATION
* PROFESSIONAL ENGINEER No. 12144-C	<u>ERO</u>	<u>sion c</u>	<u>ONTRO</u>	l pla	<u>W 3</u>
This work was prepared by me or under my supervision	ADDITION A	<u>INTERST</u> ND MODIFI i Intercha	CATION OF	F FREE	VAY ACCESS
Chris Ball 4/30/2024	Feder	al Aid Pr	oject No.	NH-H1	<u>-1(271)</u>
TSUNAGA & ASSOCIATES, INC. EXP. DATE	Scale: As A			•	<i>st 2022</i>
ensions at job before proceeding with work.	511	EET No. <b>B</b>	MP-30F	107 5	HEETS
				6	56

<u>Graphic Scale</u>



ORIGINAL PLAN NOTE BOOK

		FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS				
<u>gend</u>		HAWAII	HAW.	NH-H1-1(271)	2022	67	167				
	Property L	Property Line									
	Limits of (	Limits of Construction									
	Limits of (	Grading ∉	Disturt	ped Area							
570	Finish Gra	ade Contour	-								
570	Exist. Gra	de Contour									
SF SF	Compost F	Compost Filter Sock, See Det. 02/BMP-6									
~ <u>_</u>	Good Neigl	hbor Constr	cuction,	/Dust Fence, S	See Det.	06/BN	1P-6				
	Straw Wat	tle, See De	t. 01/B	MP-5							
SD SD	Drain Line	Drain Line									
	Stabilized	Stabilized Construction Access, See Det. 01/BMP-6									
* * * * * * * * * * * * * * * * * * * *	Grassed A	Grassed Area									
<b>~</b> ~~	Flow Arro	W									
	Drain Inle	et									
	Drain Inle	Drain Inlet Protection, See Det. 04/BMP-6									
	Catch Basin Protection, See Det. 03/BMP-6										
	<u>Note:</u>										
	the ( and Sedi addi	Contract Do do not con ment Contro tional BMP	ocument stitute ol Plan s based	Control BMP s are minimun an acceptable The Contract d upon their m tions and cons	n BMP I and/or or shall peans ar	require comple incorp d meth	ments ete porate pods				

	<u>Graphic Sc</u> 1" = 40' 40' 20' 0	
CLICENSED CLICENSED PROFESSIONAL ENGINEER No. 12144-C	DEPARTMENT O HIGHWA	OF HAWAII F TRANSPORTATION YS DIVISION
This work was prepared by me or under my supervision	ADDITION AND MODIFIC (Kapolei Interchar Federal Aid Pro	
MITSUNAGA & ASSOCIATES, INC. EXP. DATE NOTE: Contractor to check and verify dimensions at job before proceeding with work.	Scale: As Noted Sheet No. <b>BN</b>	Date: August 2022 IP-40F 167 SHEETS

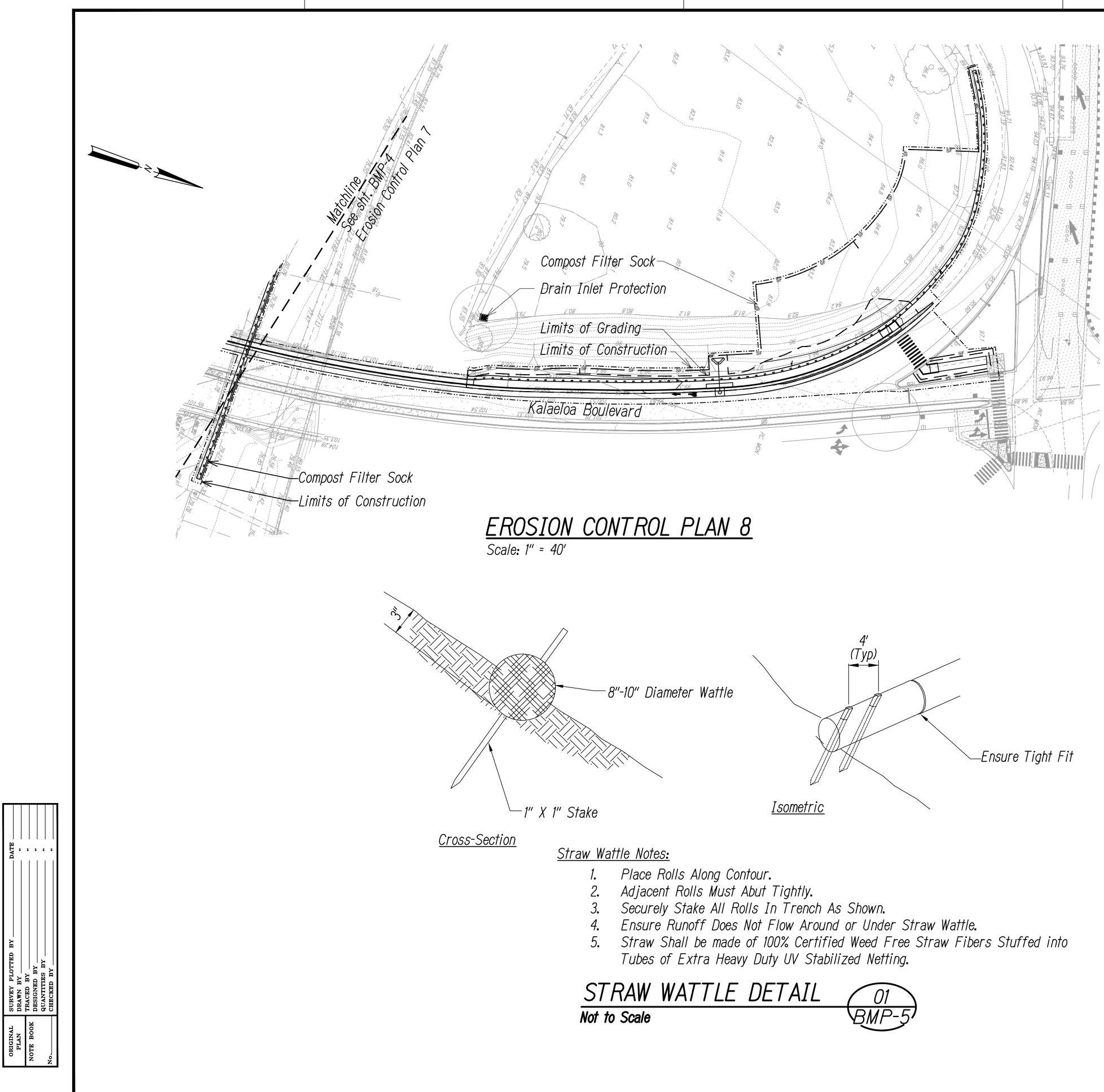
67

accordance with the Contract Documents including

Monitoring, and Removal of BMP.

applicable permit document requirements. Cost shall be

included in Pay Item 209.0100, Installlation, Maintenance,



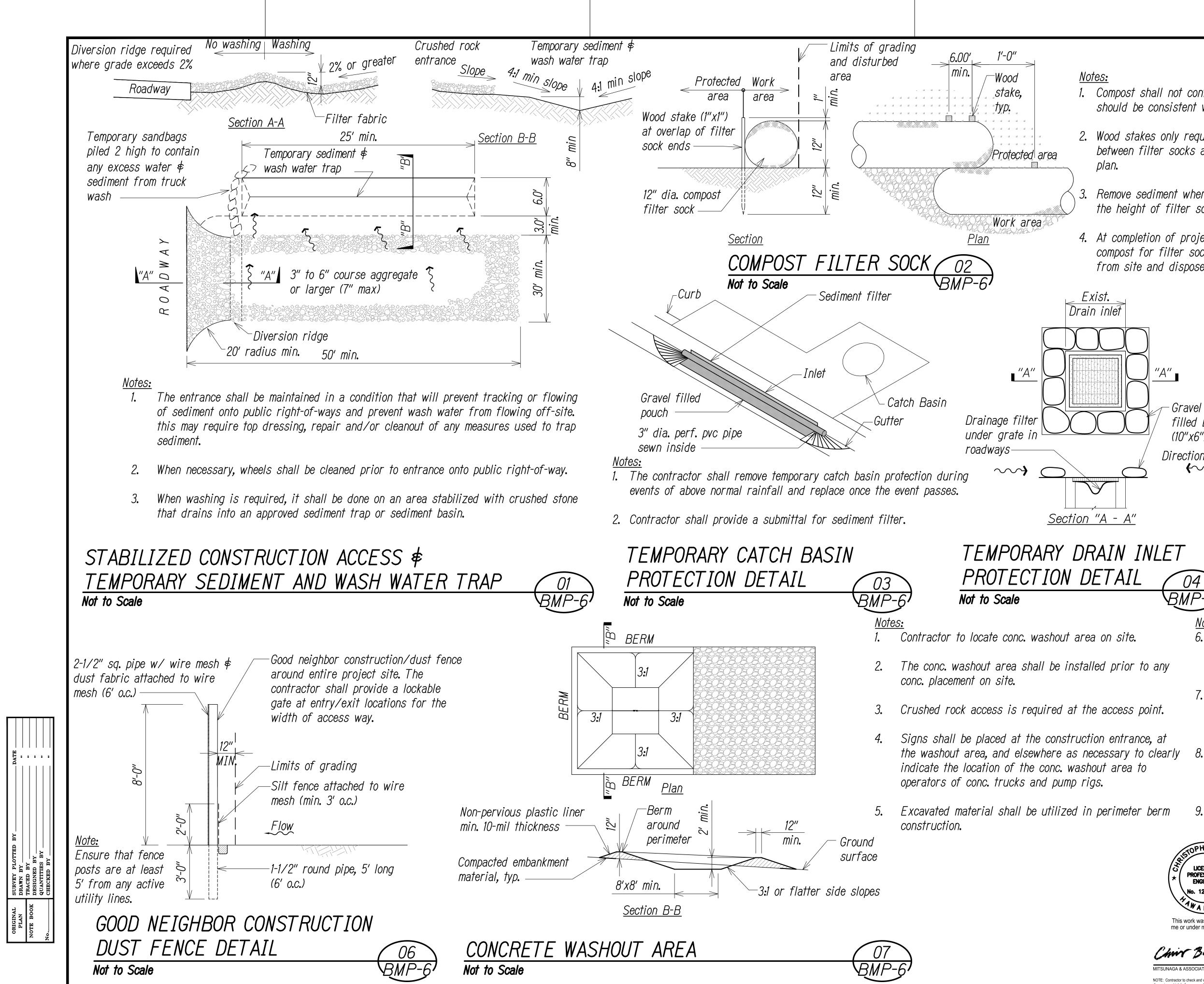
| | | | | |

		FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
<u>Legend</u>		HAWAII	HAW.	NH-H1-1(271)	2022	68	167
	Property L	ine					
	Limits of (	Constructio	n				
	Limits of (	Grading ¢	Disturt	oed Area			
— — — 570 — — —	Finish Gra	de Contour	-				
— — — 570 — — —	Exist. Grad	le Contour					
SF SF	Compost Filter Sock, See Det. 02/BMP-6						
-000	Good Neighbor Construction/Dust Fence, See Det. 06/BMP-6						
	Straw Wattle, See Det. 01/BMP-5						
SD SD	Drain Line						
	Stabilized Construction Access, See Det. 01/BMP-6						
<pre></pre>	Grassed A	rea					
<b>~</b> ~~	Flow Arrow	N					
	Drain Inle	t					
	Drain Inle	t Protectio	n, See	Det. 04/BMP-0	6		
	Catch Bas	in Protecti	on, See	e Det. 03/BMP	-6		
	<u>Note:</u>						

Sediment and Erosion Control BMP measures shown in the Contract Documents are minimum BMP requirements and do not constitute an acceptable and/or complete Sediment Control Plan. The Contractor shall incorporate additional BMPs based upon their means and methods considering site conditions and construction sequence in accordance with the Contract Documents including applicable permit document requirements. Cost shall be included in Pay Item 209.0100, Installlation, Maintenance, Monitoring, and Removal of BMP.

	1" = 40' <u>40' 20' 0 40' 80'</u>
RESTOPHER 4.	STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
* PROFESSIONAL ENGINEER No. 12144-C FAW A 11, U.S.	EROSION CONTROL PLAN 5
This work was prepared by me or under my supervision	INTERSTATE ROUTE H-1 ADDITION AND MODIFICATION OF FREEWAY ACCESS
Chine Ball 4/30/2024 ISUNAGA & ASSOCIATES, INC. EXP. DATE	(Kapolei Interchange Complex), Phase 3Federal Aid Project No. NH-H1-1(271)Scale: As NotedDate: August 2022
ISUNAGA & ASSOCIATES, INC. EXP. DATE TE: Contractor to check and verify ensions at job before proceeding with work.	SHEET No. BMP-50F 167 SHEETS
	68

<u>Graphic Scale</u>



	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
	HAWAII	HAW.	NH-H1-1(271)	2022	69	167
-						

1. Compost shall not contain biosolids \$ should be consistent with EPA guidelines.

2. Wood stakes only required at connection between filter socks as shown on detail

Remove sediment when depth reaches 1/3 the height of filter sock.

4. At completion of project, all filter sock and compost for filter sock shall be removed from site and disposed of properly.

All Erosion Control BMP's and Sediment Controls shall conform to the State of Hawaii, DOT Highways Division's "Construction BMP Field Manual"

BMP Detail Note:

Toggle Bolt for Conn. (Typ. of 4) High Flow Monofilament Fabric 11" O.D. Overflow- $\bigcirc$ filled bags

(10"x6"x12") Direction of flow **~**~~~

Gravel

04 BMP-6'

Toggle Bolt Detail TEMPORARY INLET GRATE COVER DETAIL 05 BMP-6 Not to Scale

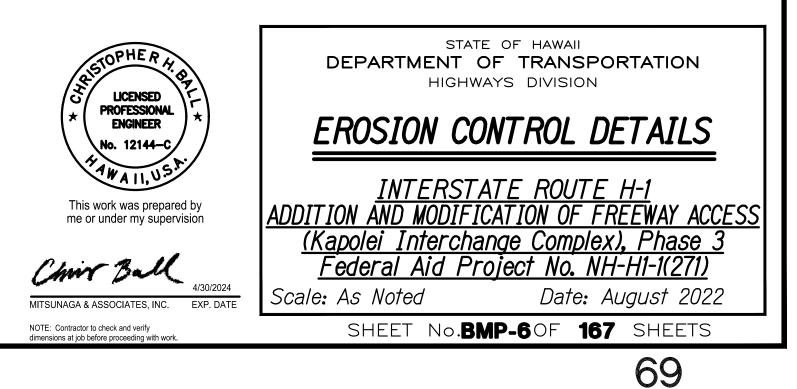
Notes (cont.):

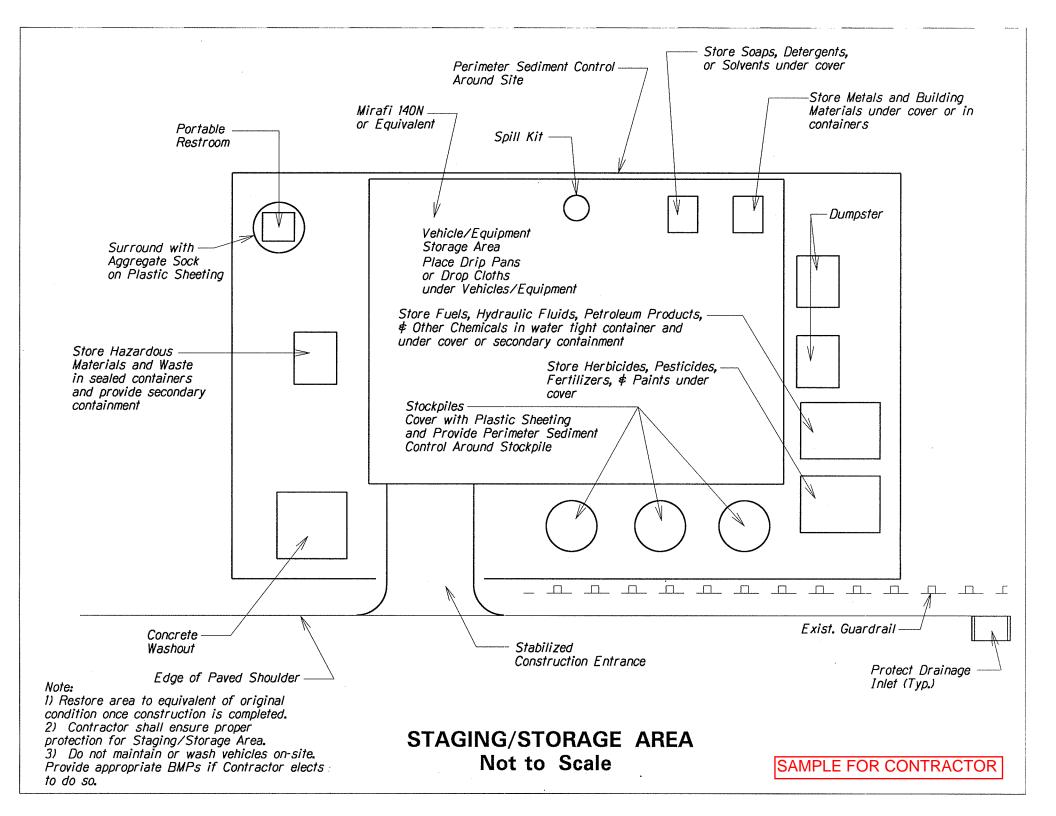
The concrete washout area shall be repaired and enlarged or cleaned out as necessary to maintain capacity for wasted conc.

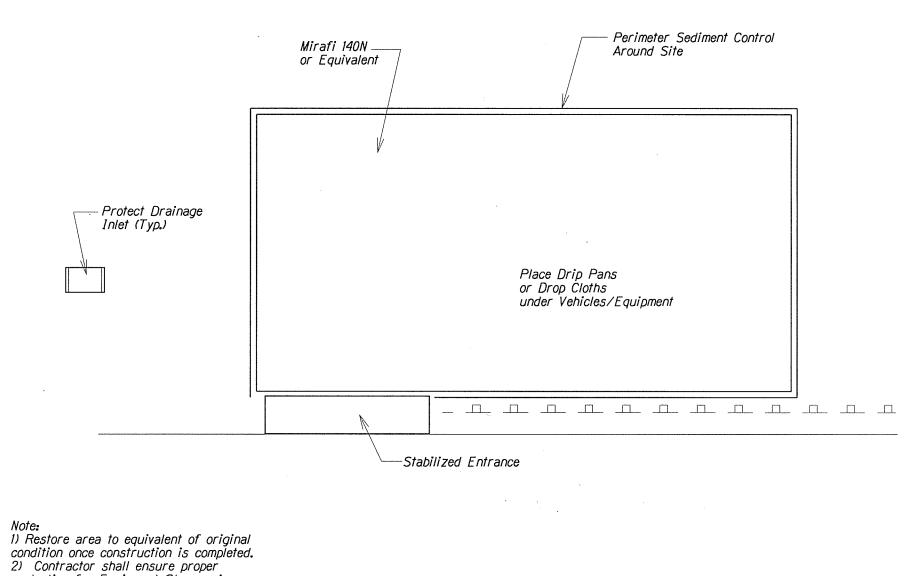
At the end of construction, all conc. shall be removed from the site and disposed of at an approved waste site.

When the conc. washout area is removed, the disturbed area shall be drill seeded and crimp mulched or otherwise stabilized.

Inspect weekly, during and after any storm event. 9.







protection for Equipment Storage Area.

EQUIPMENT STORAGE AREA Not to Scale

SAMPLE FOR CONTRACTOR