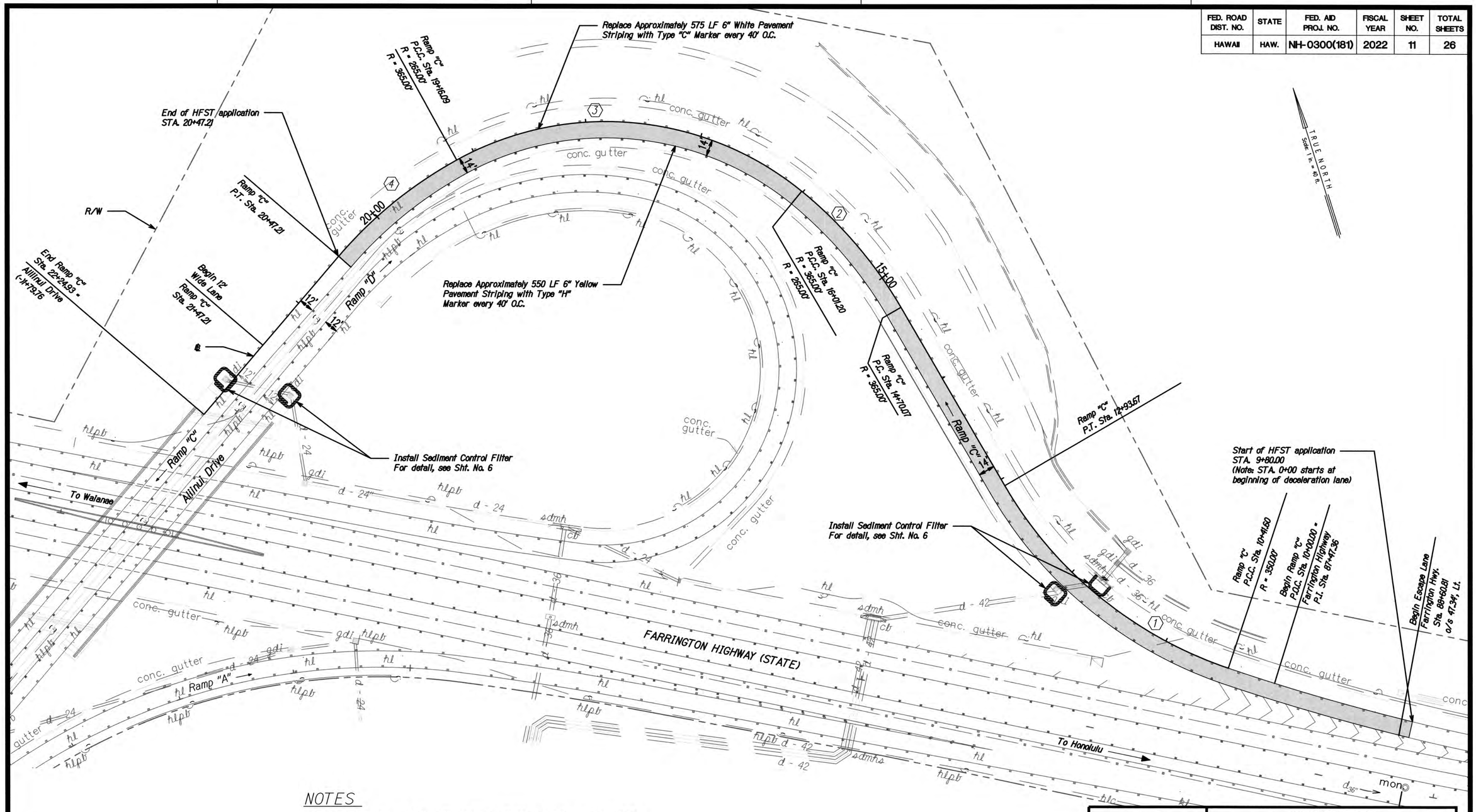
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0300(181)	2022	11	26



CURVE DATA				
	①	②	③	④
Δ	23°45'00"	23°45'00"	68°05'00"	20°35'00"
R	279.58'	270.38'	265.00'	365.00'
L	252.07'	112.08'	314.89'	131.13'
T	58.79'	56.86'	179.03'	66.28'

NOTES

1. Remove all striping and RPMs within HFST applicable area before applying HFST.
2. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
3. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
4. Restore all striping & RPMs in accordance with DOT Std. Plans TE-26 to TE-28A, and DOT memo HWY-TD 20-2.0150
5. 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, Installation, Maintenance, Monitoring, and Removal of BMP.

Ramp "C"
Sta. 9+80.00 to Sta. 20+47.21
Apply HFST to existing lane.
Lane width = 14 ft., Typ.
Total area of HFST Application = 35,080 SF

40 20 0 40 80
Graphic Scale in Feet

ANSON M. MURAYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6975-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. LICENSE EXPIRATION DATE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

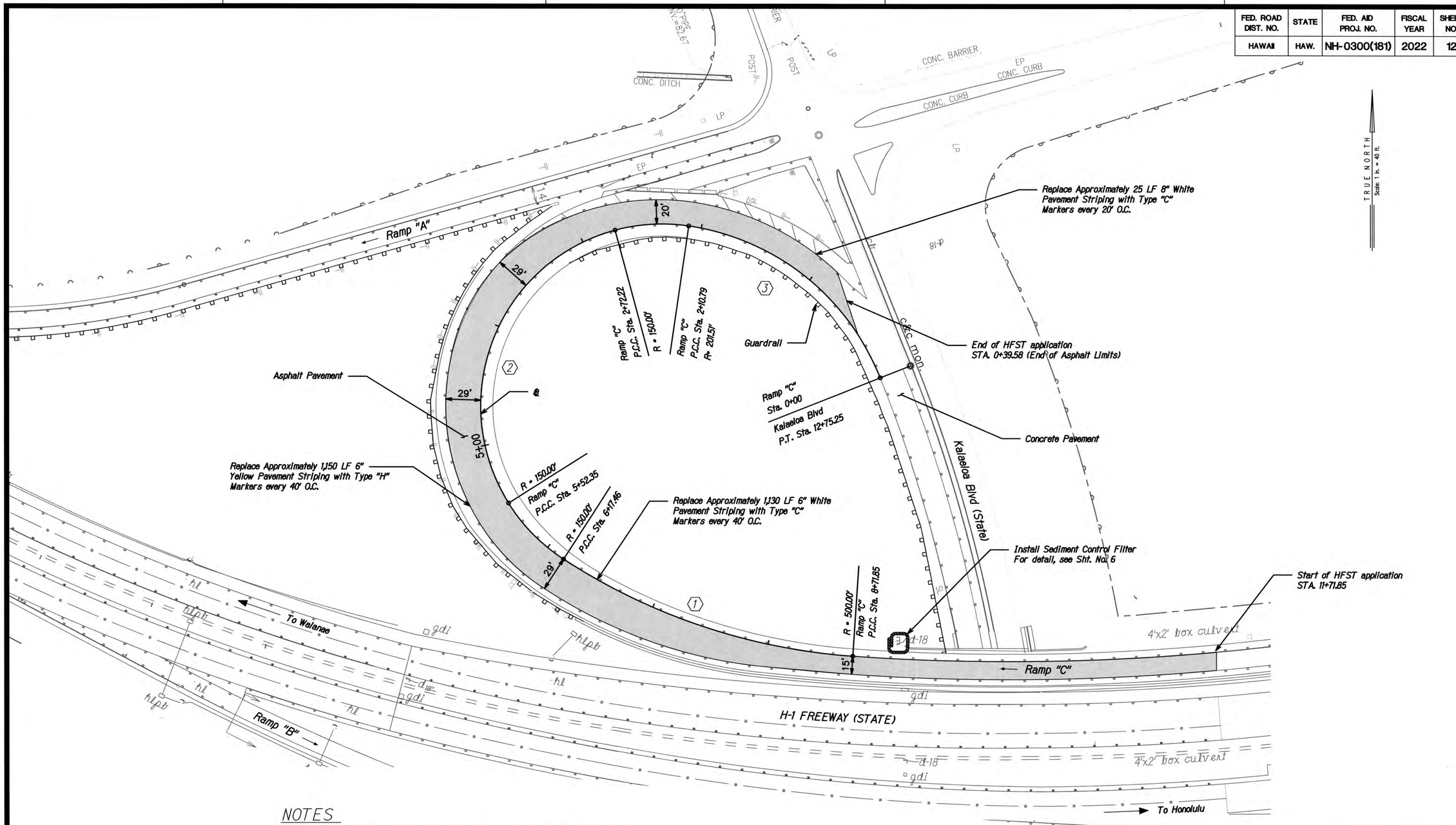
SITE PLAN-1
KO OLINA INTERCHANGE

HIGH FRICTION SURFACE TREATMENT INSTALLATION
AT VARIOUS LOCATIONS ON OAHU, ISLAND OF OAHU
FEDERAL AID PROJECT NO. NH-0300(181)

Scale: 1 : 40 Date: MARCH, 2022

SHEET No. 1 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0300(181)	2022	12	26



CURVE DATA			
	①	②	③
Δ	29°09'02"	155°20'35"	43°44'40"
R	500.00'	150.00'	201.51'
T	65.00	343.12	40.44
L	254.39'	406.68'	153.84'

NOTES

1. Remove all striping and RPMs within HFST applicable area before applying HFST.
2. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
3. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
4. Restore all striping & RPMs in accordance with DOT Std. Plans TE-26 to TE-28A, and DOT memo HWY-TD 20-2.0150
5. 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, Installation, Maintenance, Monitoring, and Removal of BMP.

Ramp "C"
Sta. 11+71.85 to End of Asphalt Limits
Apply HFST to existing lane.
Lane width = 15-29 ft., Typ.
Total area of HFST Application = 25,442 SF

40 20 0 40 80
Graphic Scale in Feet

ANSON M. MURAYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6975-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. LICENSE EXPIRATION DATE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

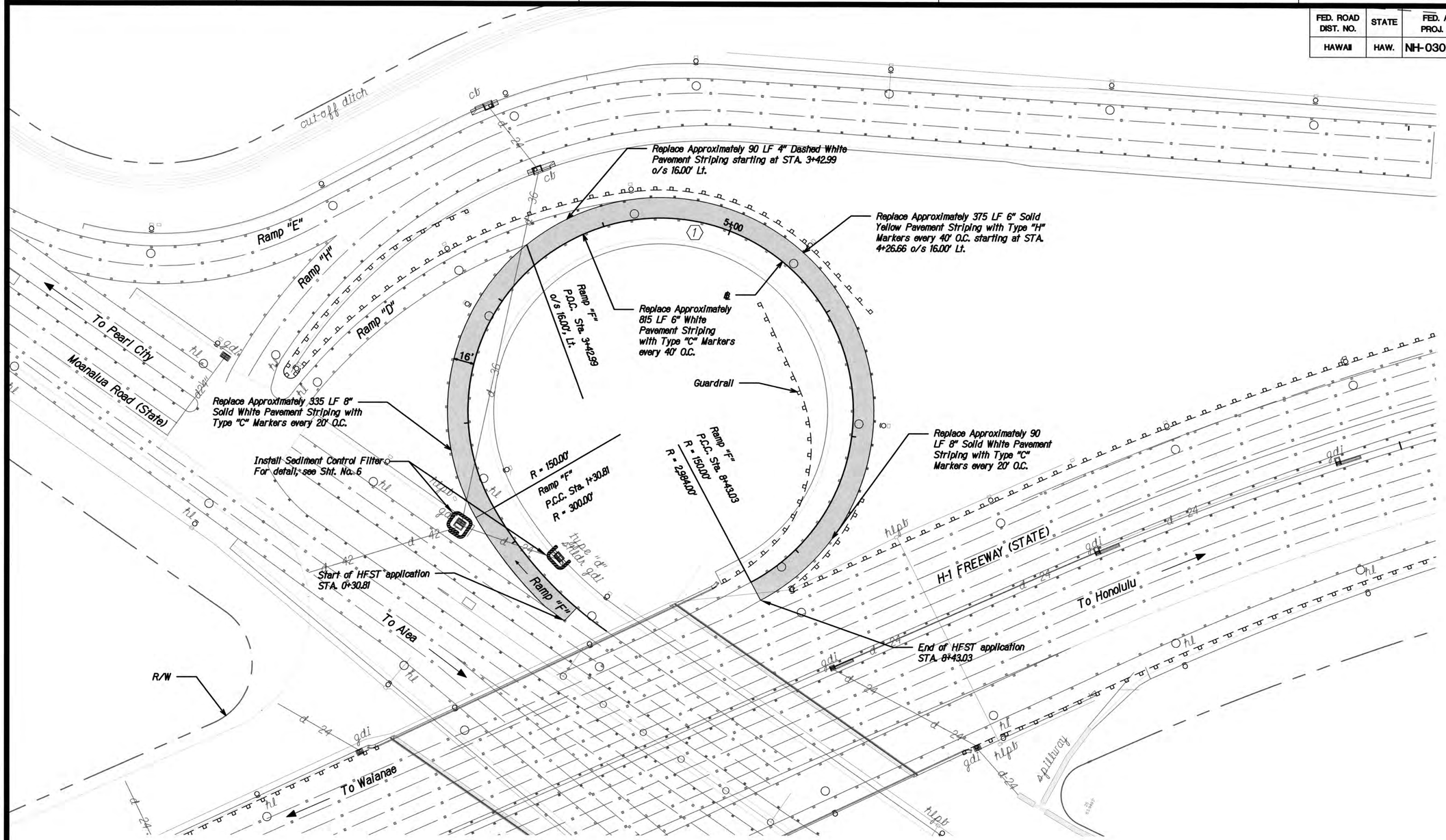
SITE PLAN-2
PALAILAI INTERCHANGE

HIGH FRICTION SURFACE TREATMENT INSTALLATION
AT VARIOUS LOCATIONS ON OAHU, ISLAND OF OAHU
FEDERAL AID PROJECT NO. NH-0300(181)

Scale: 1 : 40 Date: MARCH, 2022

SHEET No. 2 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0300(181)	2022	13	26



CURVE DATA	
	(1)
Δ	272°00'00"
R	150.00'
T	144.85
L	712.00'

NOTES

1. Remove all striping and RPMs within HFST applicable area before applying HFST.
2. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
3. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
4. Restore all striping & RPMs in accordance with DOT Std. Plans TE-26 to TE-28A, and DOT memo HWY-TD 20-2.0150
5. 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, Installation, Maintenance, Monitoring, and Removal of BMP.

Ramp "F"
Sta. 0+30.81 to Sta. 8+43.03
Apply HFST to existing lane.
Lane width = 16 ft., Typ.
Total area of HFST Application = 13,602 SF

40 20 0 40 80
Graphic Scale in Feet

ANSON M. MURAYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6975-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. LICENSE EXPIRATION DATE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

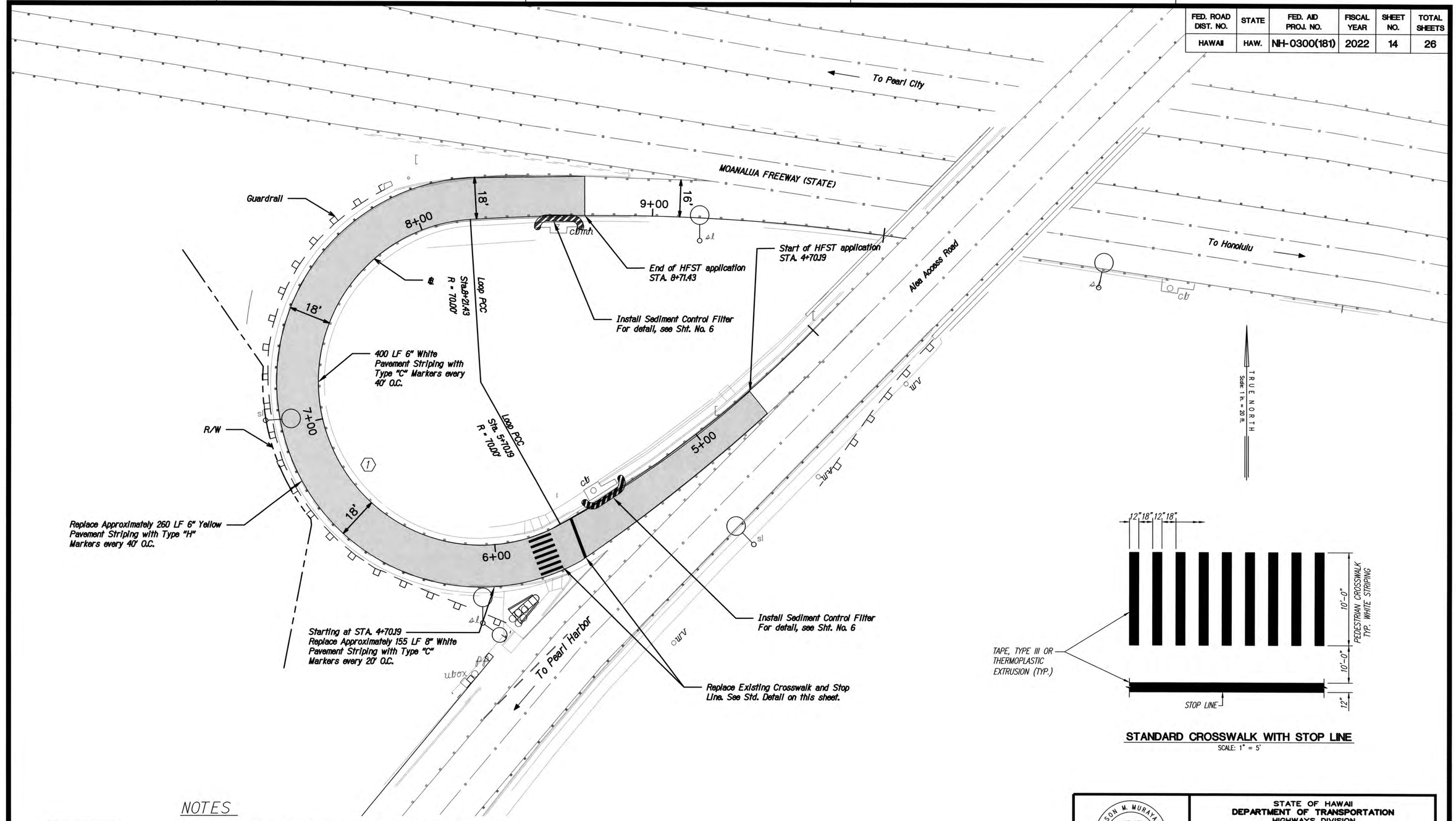
SITE PLAN-3
WAIAU INTERCHANGE

HIGH FRICTION SURFACE TREATMENT INSTALLATION
AT VARIOUS LOCATIONS ON OAHU, ISLAND OF OAHU
FEDERAL AID PROJECT NO. NH-0300(181)

Scale: 1 : 40 Date: MARCH, 2022

SHEET No. 3 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0300(181)	2022	14	26



STANDARD CROSSWALK WITH STOP LINE
SCALE: 1" = 5'

CURVE DATA	
	⑦
△	20°35'00"
R	70.00'
T	33.13
Ch	130.42'
Lc	136.00'

NOTES

1. Remove all striping and RPMs within HFST applicable area before applying HFST.
2. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
3. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
4. Restore all striping & RPMs in accordance with DOT Std. Plans TE-26 to TE-28A, and DOT memo HWY-TD 20-2.0150
5. 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, Installation, Maintenance, Monitoring, and Removal of BMP.

Loop
Sta. 4+70.19 to Sta. 8+71.43
Apply HFST to existing lane.
Lane width = 18 ft., Typ.
Total area of HFST Application = 7,540 SF

20 10 0 20 40
Graphic Scale in Feet

ANSON M. MURAYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6975-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. LICENSE EXPIRATION DATE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

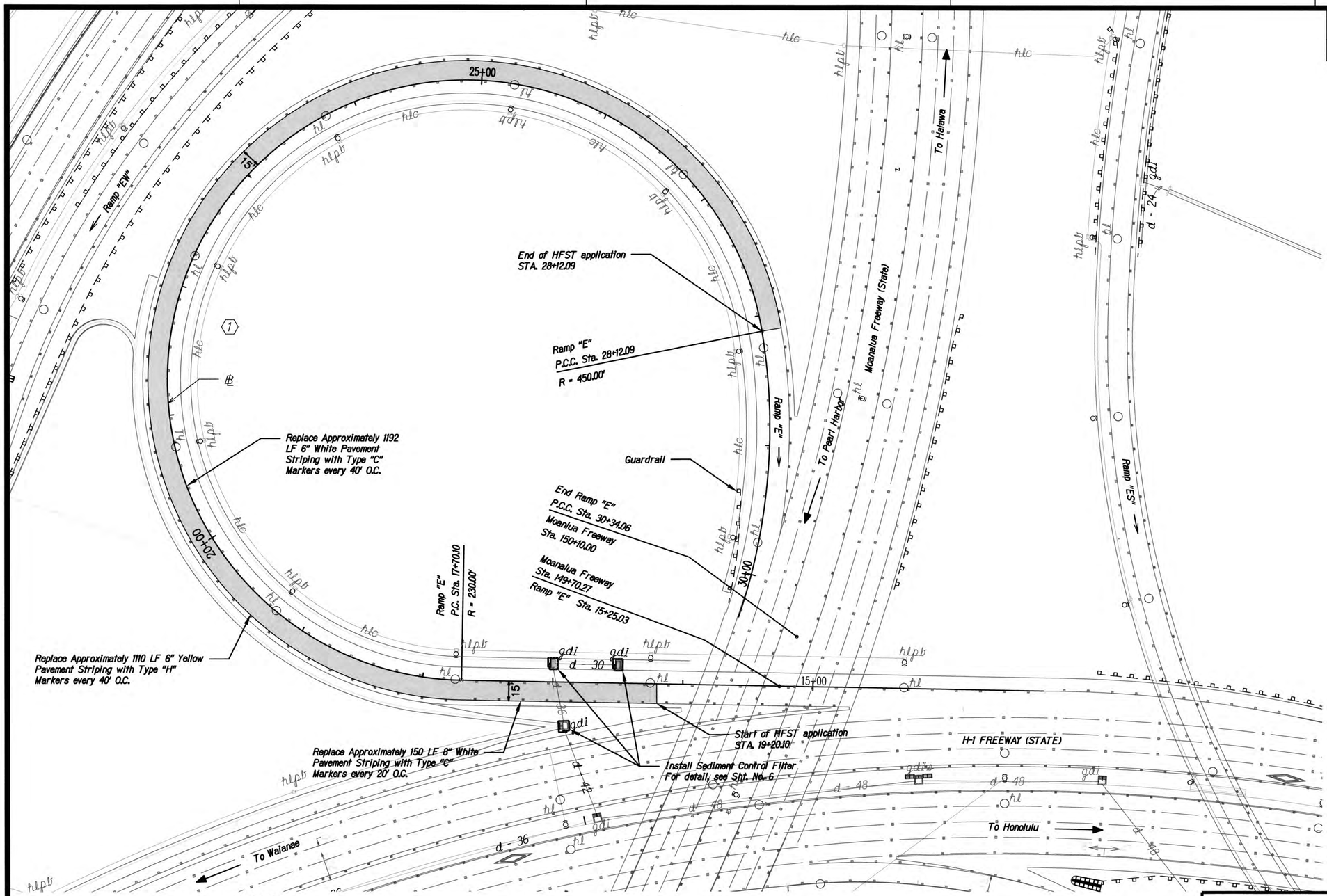
SITE PLAN-4
STADIUM INTERCHANGE

HIGH FRICTION SURFACE TREATMENT INSTALLATION
AT VARIOUS LOCATIONS ON OAHU, ISLAND OF OAHU
FEDERAL AID PROJECT NO. NH-0300(181)

Scale: 1 : 20 Date: MARCH, 2022

SHEET No. 4 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0300(181)	2022	15	26



CURVE DATA	
	⟨1⟩
△	260°00'00"
R	230.00'
T	274.10
Ch	353.50'
Lc	1042.0'

NOTES

1. Remove all striping and RPMs within HFST applicable area before applying HFST.
2. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
3. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
4. Restore all striping & RPMs in accordance with DOT Std. Plans TE-26 to TE-28A, and DOT memo HWY-TD 20-2.0150
5. 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, Installation, Maintenance, Monitoring, and Removal of BMP.

Ramp "E"
Sta. 19+20.10 to Sta. 28+12.09
Apply HFST to existing lane.
Lane width = 15 ft., Typ.
Total area of HFST Application = 18,388 SF

40 20 0 40 80
Graphic Scale in Feet

ANSON M. MURAYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6975-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
LICENSE EXPIRATION DATE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SITE PLAN-5
HALAWA INTERCHANGE

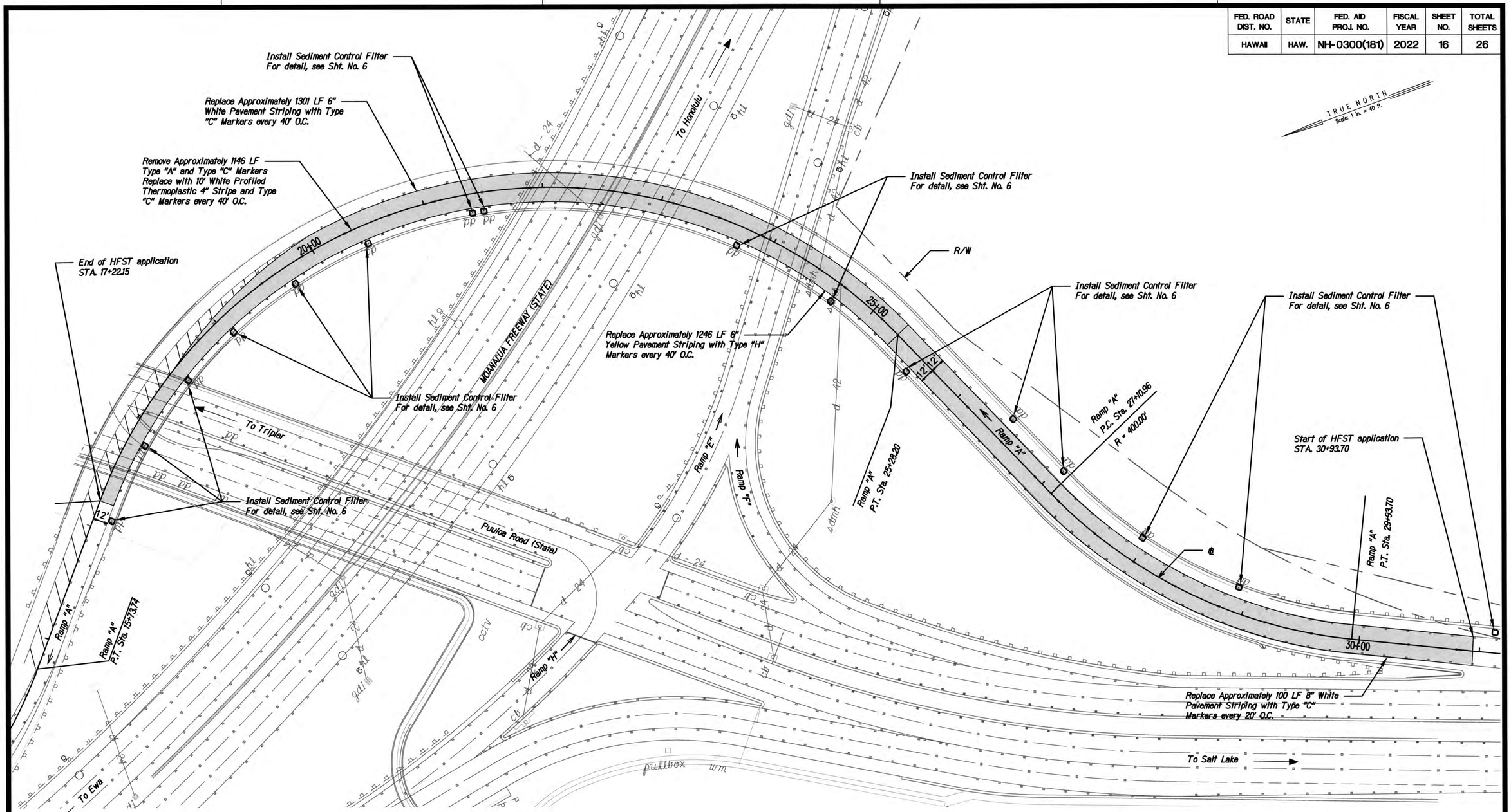
HIGH FRICTION SURFACE TREATMENT INSTALLATION

AT VARIOUS LOCATIONS ON OAHU, ISLAND OF OAHU
FEDERAL AID PROJECT NO. NH-0300(181)

Scale: 1 : 40 Date: MARCH, 2022

SHEET No. 5 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0300(181)	2022	16	26



CURVE DATA		
	①	②
△	40°39'66"	115°00'00"
R	400.00'	388.00'
T	147.16'	609.04'
L	282.67'	781.86'

NOTES

1. Remove all striping and RPMs within HFST applicable area before applying HFST.
2. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
3. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
4. Restore all striping & RPMs in accordance with DOT Std. Plans TE-26 to TE-28A, and DOT memo HWY-TD 20-2.0150
5. 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, Installation, Maintenance, Monitoring, and Removal of BMP.

Ramp "A"
Sta. 17+22.15 to Sta. 30+93.70
Apply HFST to existing lane.
Lane width = 12-24 ft., Typ.
Total area of HFST Application = 30,425 SF

40 20 0 40 80
Graphic Scale in Feet

ANSON M. MURAYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6975-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. LICENSE EXPIRATION DATE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SITE PLAN-6
PUULOA INTERCHANGE

HIGH FRICTION SURFACE TREATMENT INSTALLATION

AT VARIOUS LOCATIONS ON OAHU, ISLAND OF OAHU
FEDERAL AID PROJECT NO. NH-0300(181)

Scale: 1 : 40 Date: MARCH, 2022

SHEET No. 6 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0300(181)	2022	17	26

H-3 FREEWAY (STATE)

Ramp "D"

Replace Approximately 830 LF 6" Yellow Pavement Striping with Type "H" Markers every 40' O.C.

Remove Approximately 800 LF Type "A" and Type "C" Markers Replace with 10' White Profiled Thermoplastic 4" Stripe and Type "C" Markers every 40' O.C.

Replace Approximately 765 LF 6" White Pavement Striping with Type "C" Markers every 40' O.C

End of HFST application STA. 1101+78.85

Ramp "D" P.T. Sta. 1101+78.85

Ramp "D" P.C. Sta. 1105+78.41

R = 2500.00'

1105+00

1100+00

1095+00

1090+00

12' 12'

R/W

Install Sediment Control Filter For detail, see Sht. No. 6

Guardrail

Ramp "D" P.C.C. Sta. 1095+64.18 R = 230.00' R = 1800.00'

Start of HFST application STA. 1097+14.18

Ramp "D" P.T. Sta. 1089+45.78

Likelike Highway P.T. Sta. 26+14.59

To Honolulu

To Kaneohe

LIKELIKE HIGHWAY (STATE)

TRUE NORTH
Scale: 1 in. = 40 ft.

Graphic Scale in Feet
40 20 0 40 80

CURVE DATA	
	⟨1⟩
△	133°00'00"
R	230.00'
T	528.96
Ch	447.42'
Lc	614.75'

NOTES

1. Remove all striping and RPMs within HFST applicable area before applying HFST.
2. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
3. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
4. Restore all striping & RPMs in accordance with DOT Std. Plans TE-26 to TE-28A, and DOT memo HWY-TD 20-2.0150
5. 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, Installation, Maintenance, Monitoring, and Removal of BMP.

Ramp "D"
Sta. 1097+14.18 to Sta. 1101+78.85
Apply HFST to existing lane.
Lane width = 12 ft., Typ.
Total area of HFST Application = 19,134 SF

ANSON M. MURAYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6975-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. LICENSE EXPIRATION DATE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

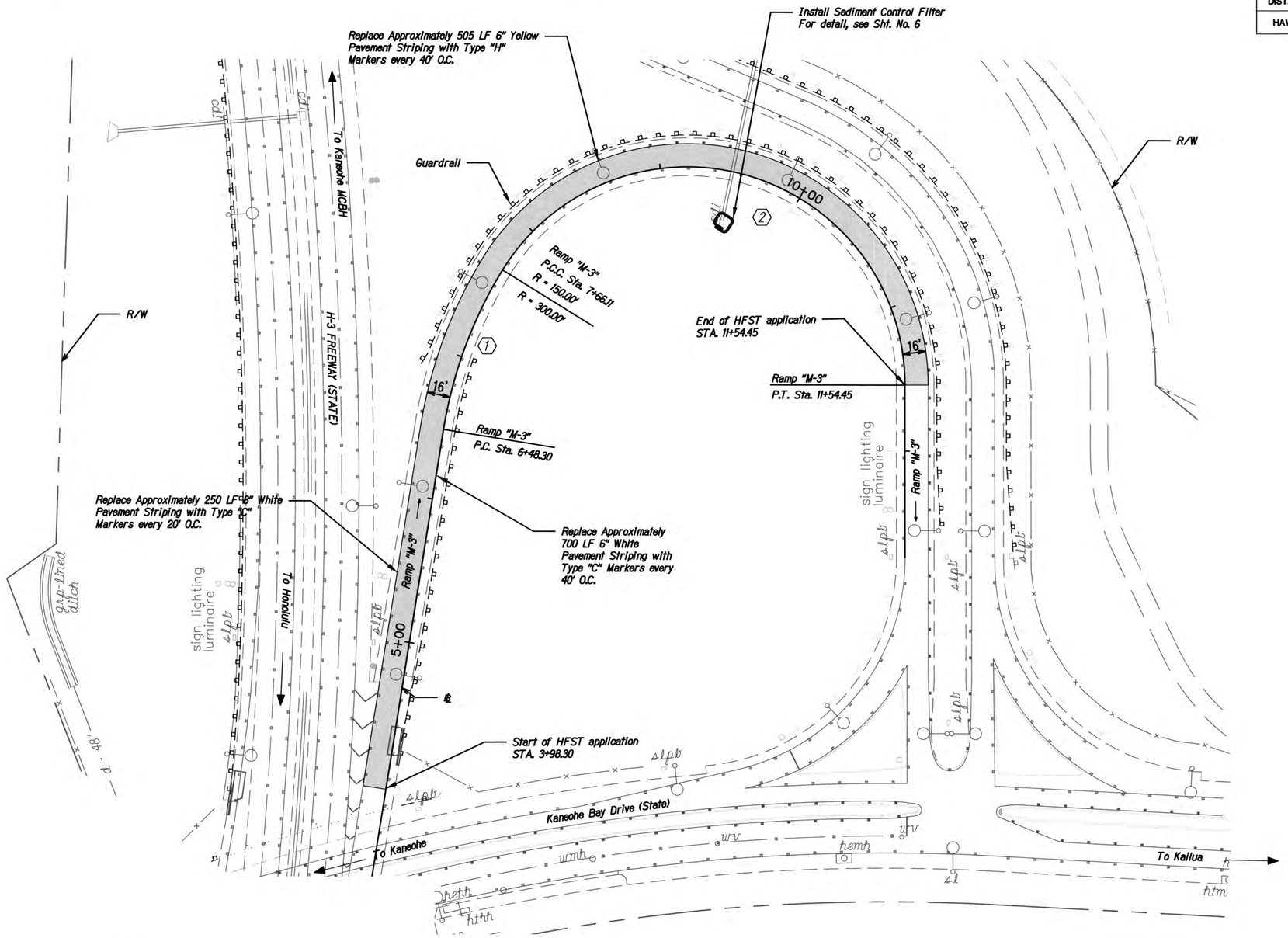
SITE PLAN-7
KANEOHE INTERCHANGE

HIGH FRICTION SURFACE TREATMENT INSTALLATION
AT VARIOUS LOCATIONS ON OAHU, ISLAND OF OAHU
FEDERAL AID PROJECT NO. NH-0300(181)

Scale: 1 : 40 Date: MARCH, 2022

SHEET No. 7 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-0300(181)	2022	18	26



CURVE DATA		
	①	②
Δ	22°30'00"	148°20'00"
R	300.00'	150.00'
T	59.67	528.91
Ch	117.05'	288.62'
Lc	117.81'	388.34'

NOTES

1. Remove all striping and RPMs within HFST applicable area before applying HFST.
2. HFST shall be applied within limits of existing edge striping, per lane widths specified in plans.
3. Asphalt and Concrete surfaces need to be properly prepared through use of appropriate abrasive cleaning and compressed air methods. Refer to ICRI standards for CSP and FHWA's Pavement Preservation Checklist Series #14 HFST.
4. Restore all striping & RPMs in accordance with DOT Std. Plans TE-26 to TE-28A, and DOT memo HWY-TD 20-2.0150
5. 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, Installation, Maintenance, Monitoring, and Removal of BMP.

Ramp "M-3"
Sta. 3+98.30 to Sta. 11+54.45
Apply HFST to existing lane.
Lane width = 16 ft, Typ.
Total area of HFST Application = 12,495 SF

40 20 0 40 80
Graphic Scale in Feet

ANSON M. MURAYAMA
LICENSED PROFESSIONAL ENGINEER
No. 6975-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION. CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. LICENSE EXPIRATION DATE: 04/30/22

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SITE PLAN-8
MOKAPU INTERCHANGE

HIGH FRICTION SURFACE TREATMENT INSTALLATION

AT VARIOUS LOCATIONS ON OAHU, ISLAND OF OAHU
FEDERAL AID PROJECT NO. NH-0300(181)

Scale: 1 : 40 Date: MARCH, 2022

SHEET No. 8 OF 8 SHEETS