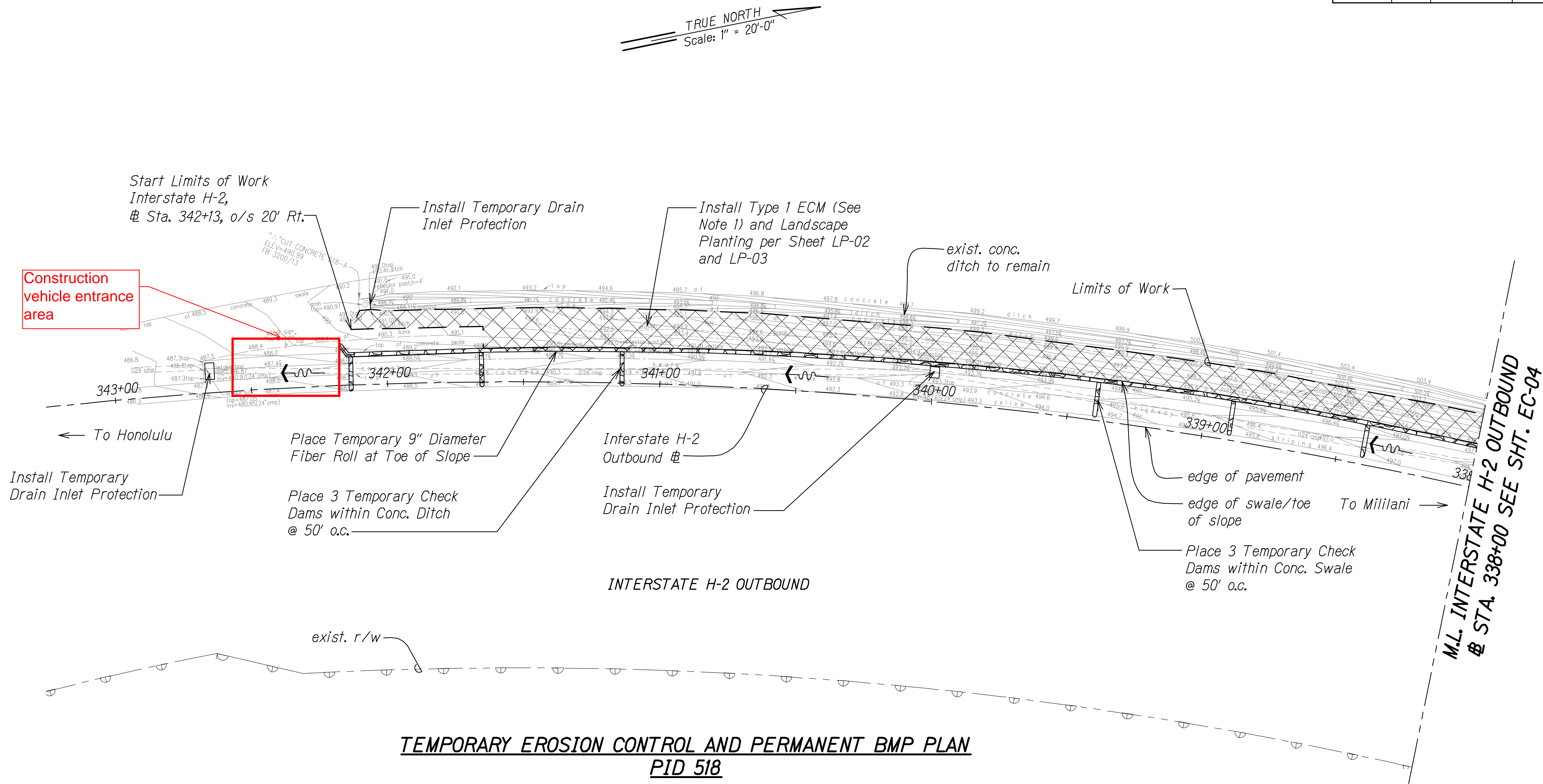


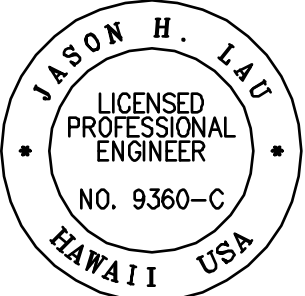
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	16	55



TEMPORARY EROSION CONTROL AND PERMANENT BMP PLAN
PID 518
Scale: 1" = 20'-0"

- Notes:**
1. Install ECM on slopes steeper than 3H:1V. Contractor shall field verify site conditions and ECM limits.
 2. For ECM details, see Sheets EC-01 & EC-02.
 3. For installation of ECM around obstacles, see Detail 5 on Sheet EC-01.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN

PID 518

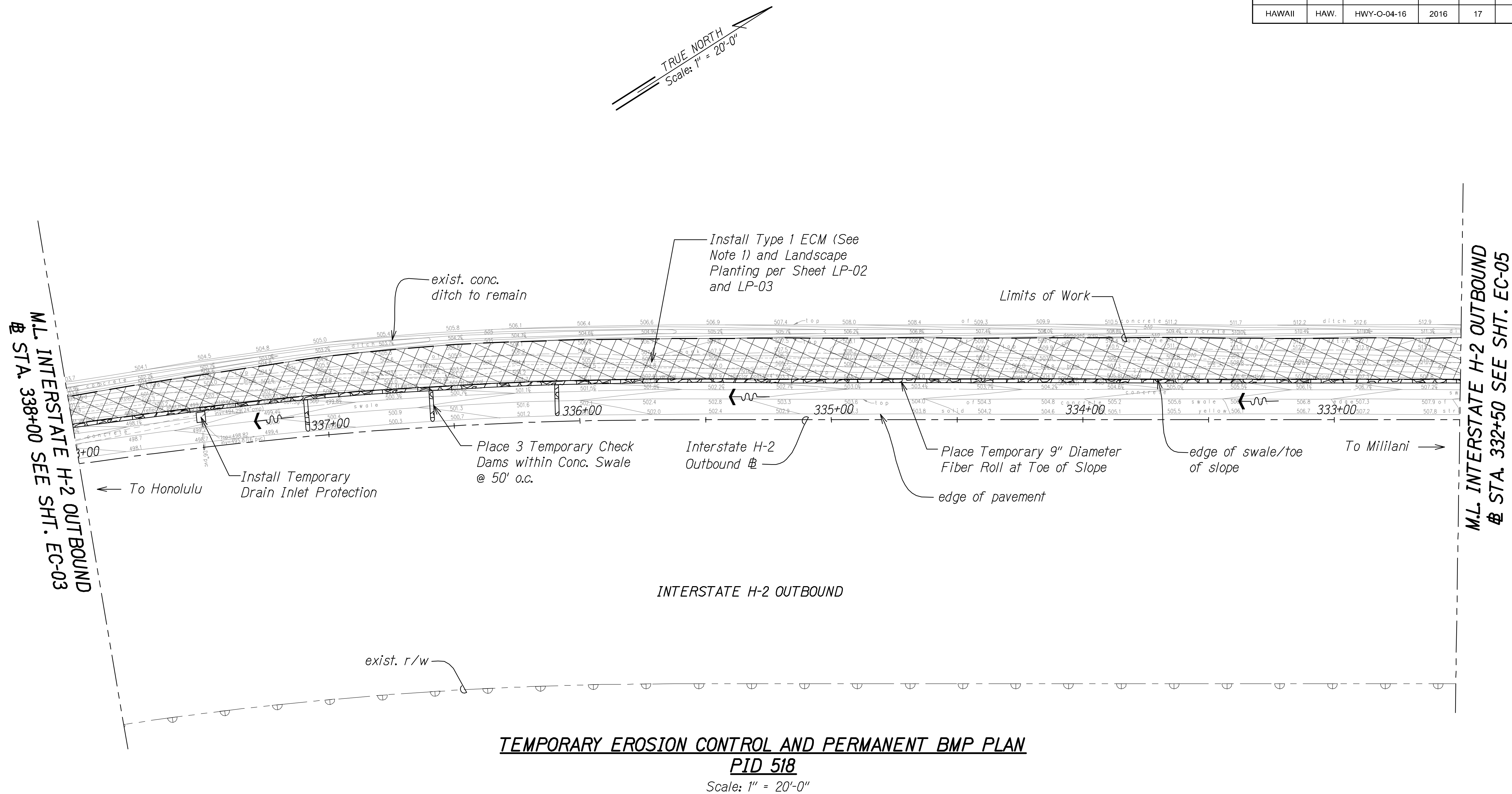
SLOPE IMPROVEMENTS FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 7

Project No. HWY-O-04-16

Scale: 1" = 20' Date: January 2016

SHEET No. EC-03 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	17	55



- Notes:
1. Install ECM on slopes steeper than 3H:1V. Contractor shall field verify site conditions and ECM limits.
 2. For ECM details, see Sheets EC-01 & EC-02.
 3. For installation of ECM around obstacles, see Detail 5 on Sheet EC-01.

JASON H. LAU
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EXP. DATE

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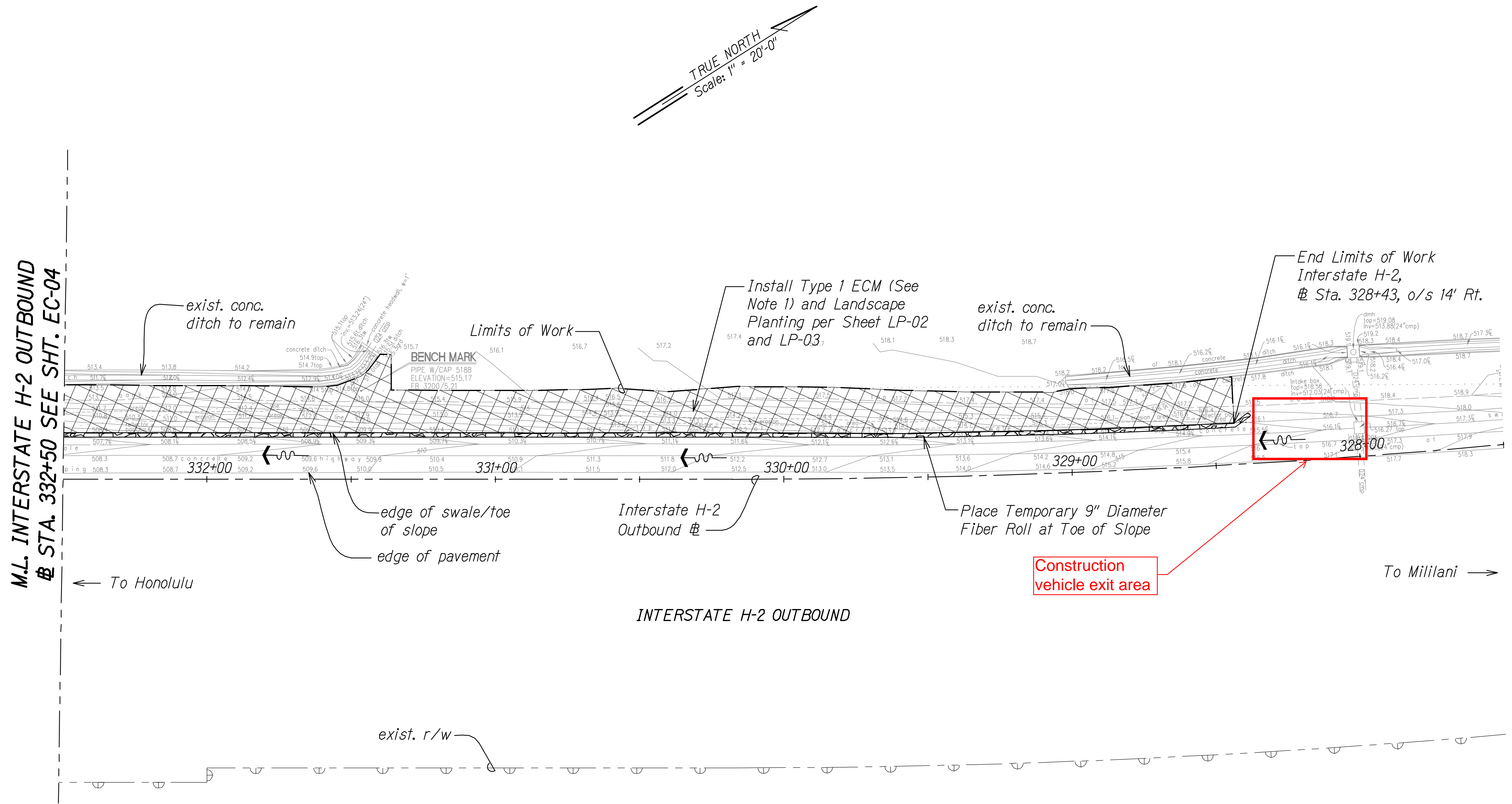
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN
PID 518
SLOPE IMPROVEMENTS FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 7
Project No. HWY-O-04-16
Scale: 1" = 20' Date: January 2016

SHEET No. EC-04 OF 14 SHEETS

17

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	18	55



- Notes:**
1. Install ECM on slopes steeper than 3H:1V. Contractor shall field verify site conditions and ECM limits.
 2. For ECM details, see Sheets EC-01 & EC-02.
 3. For installation of ECM around obstacles, see Detail 5 on Sheet EC-01.

TEMPORARY EROSION CONTROL AND PERMANENT BMP PLAN
PID 518

Scale: 1" = 20'-0"

JASON H. LIAO

LICENSED PROFESSIONAL ENGINEER

NO. 9360-C

HAWAII USA

4/30/16

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STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN

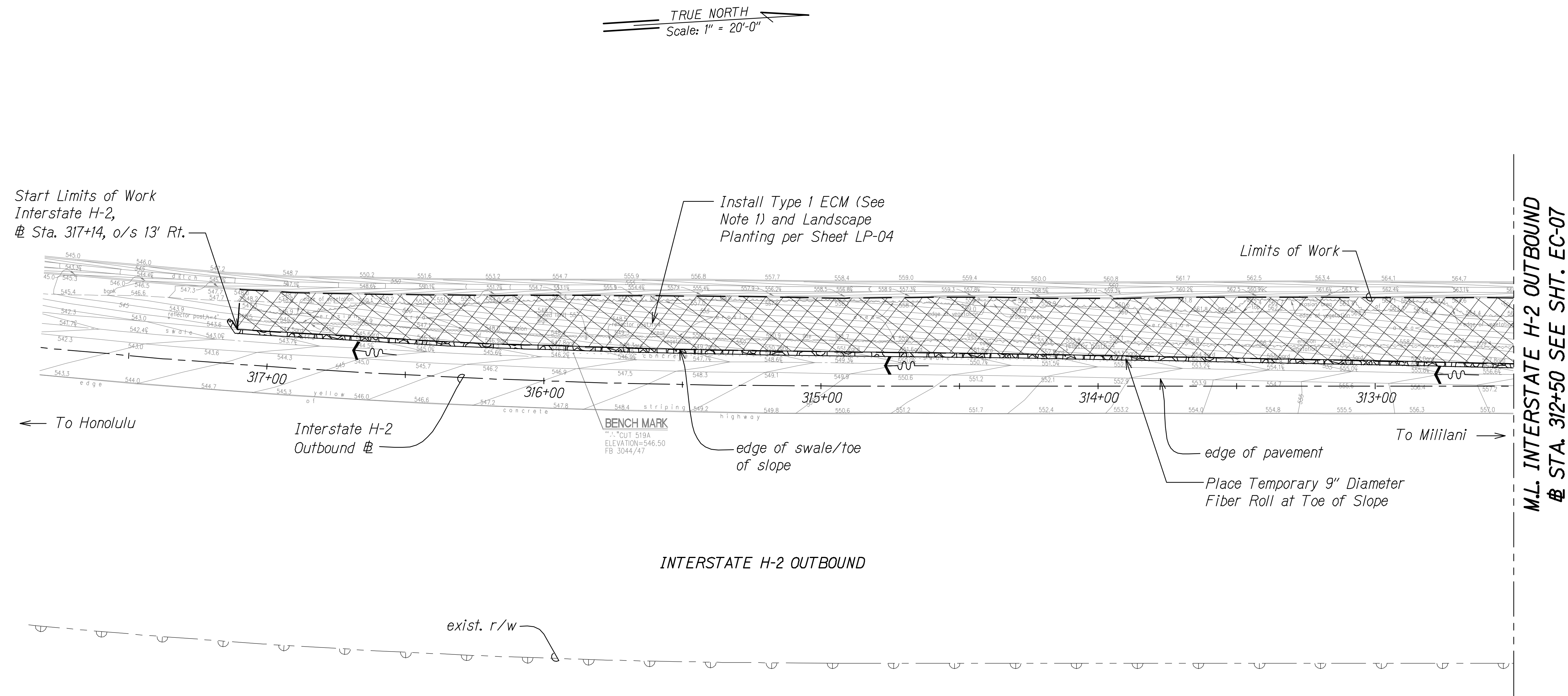
PID 518

SLOPE IMPROVEMENTS FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 7

Project No. HWY-O-04-16

Scale: 1" = 20' Date: January 2016

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	19	55



Notes:

1. Install ECM on slopes steeper than 3H:1V. Contractor shall field verify site conditions and ECM limits.
2. For ECM details, see Sheets EC-01 # EC-02.
3. For installation of ECM around obstacles, see Detail 5 on Sheet EC-01.

JASON H. LAU
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EXP. DATE

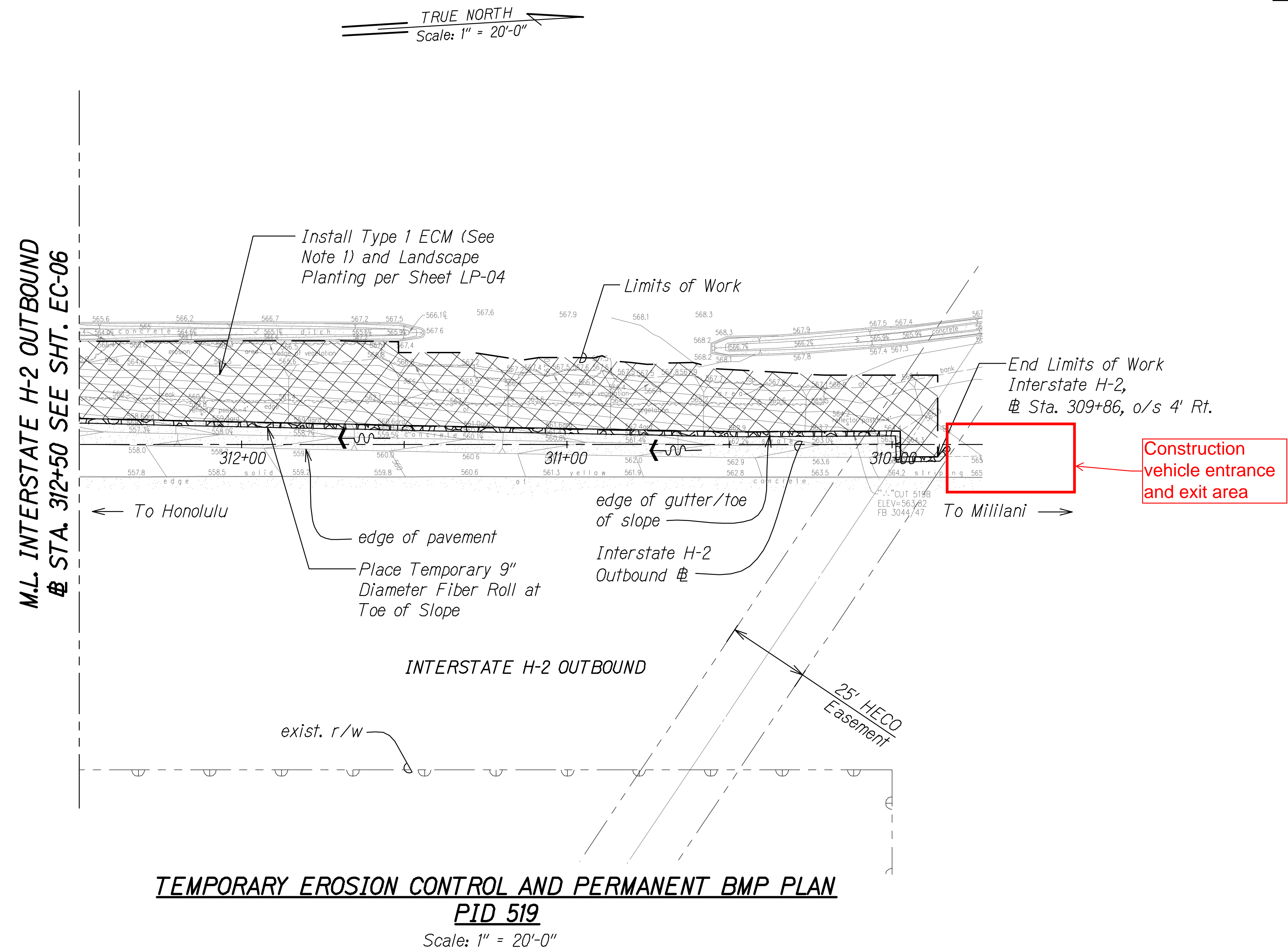
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN
PID 519
SLOPE IMPROVEMENTS FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 1
Project No. HWY-O-04-16
Scale: 1" = 20' Date: January 2016

SHEET No. EC-06 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	20	55



- Notes:
1. Install ECM on slopes steeper than 3H:1V. Contractor shall field verify site conditions and ECM limits.
 2. For ECM details, see Sheets EC-01 # EC-02.
 3. For installation of ECM around obstacles, see Detail 5 on Sheet EC-01.

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JASON H. LAU
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NO. 9360-C
HAWAII USA

4/30/16
EXP. DATE

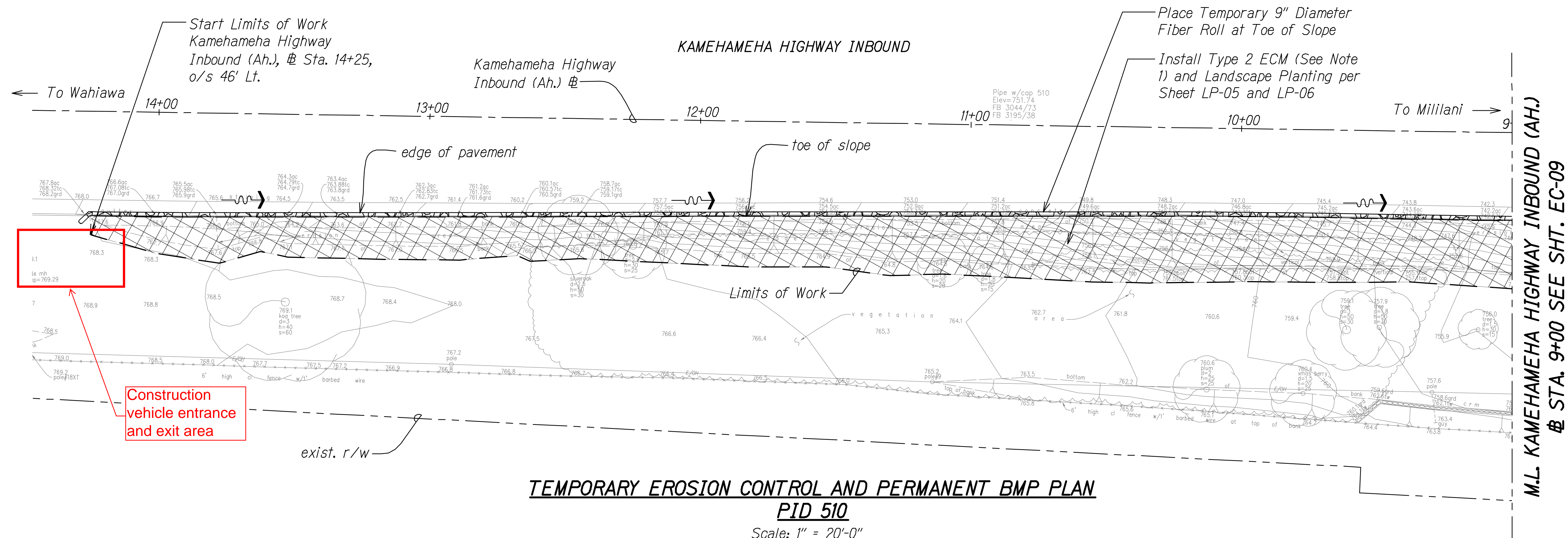
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN
PID 519
SLOPE IMPROVEMENTS FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 7
Project No. HWY-O-04-16
Scale: 1" = 20' Date: January 2016


SHEET No. EC-07 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	21	55

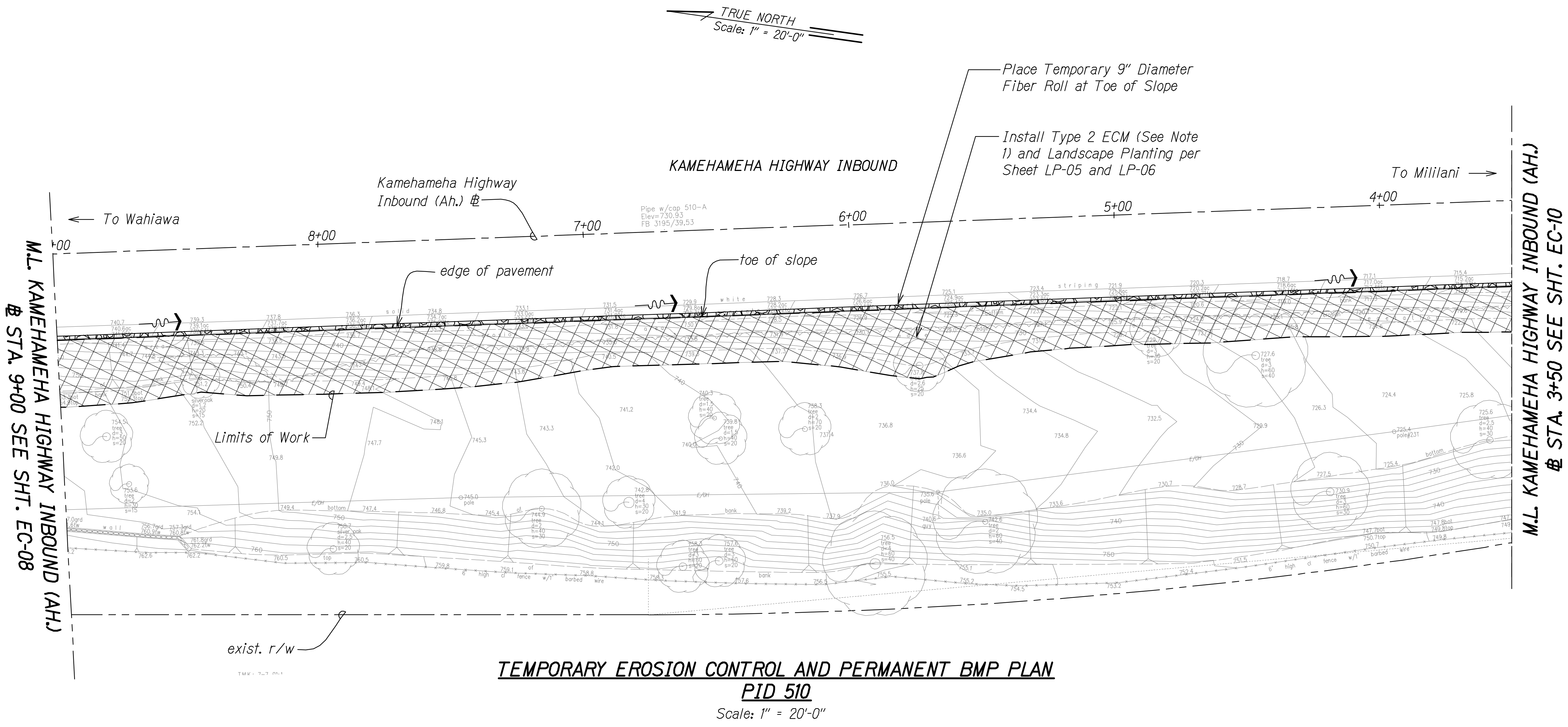


Notes:

1. *Install ECM on slopes steeper than 3H:IV. Contractor shall field verify site conditions and ECM limits.*
2. *For ECM details, see Sheets EC-01 & EC-02.*
3. *For installation of ECM around obstacles, see Detail 5 on Sheet EC-01.*
4. *See Landscaping Drawings for tree protection and removal.*

	<p>STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION</p> <p><u>TEMP. EC AND PERMANENT BMP PLAN</u></p> <p><u>PID 510</u></p> <p><u>SLOPE IMPROVEMENTS FOR EROSION CONTROL</u> <u>AT VARIOUS SITES ON OAHU, PHASE 7</u></p> <p><u>Project No. HWY-0-04-16</u></p> <p>Scale: 1" = 20' Date: January 2016</p>
<p>4/30/16 EXP. DATE</p>	<p><i>This work was prepared by me or under my supervision.</i></p>

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	22	55



M.L. KAMEHAMEHA HIGHWAY INBOUND (AH.)
@ STA. 9+00 SEE SHT. EC-08

M.L. KAMEHAMEHA HIGHWAY INBOUND (AH.)
@ STA. 3+50 SEE SHT. EC-10

- Notes:
1. Install ECM on slopes steeper than 3H:1V. Contractor shall field verify site conditions and ECM limits.
 2. For ECM details, see Sheets EC-01 & EC-02.
 3. For installation of ECM around obstacles, see Detail 5 on Sheet EC-01.
 4. See Landscaping Drawings for tree protection and removal.

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NO. 9360-C
HAWAII USA

4/30/16
EXP. DATE

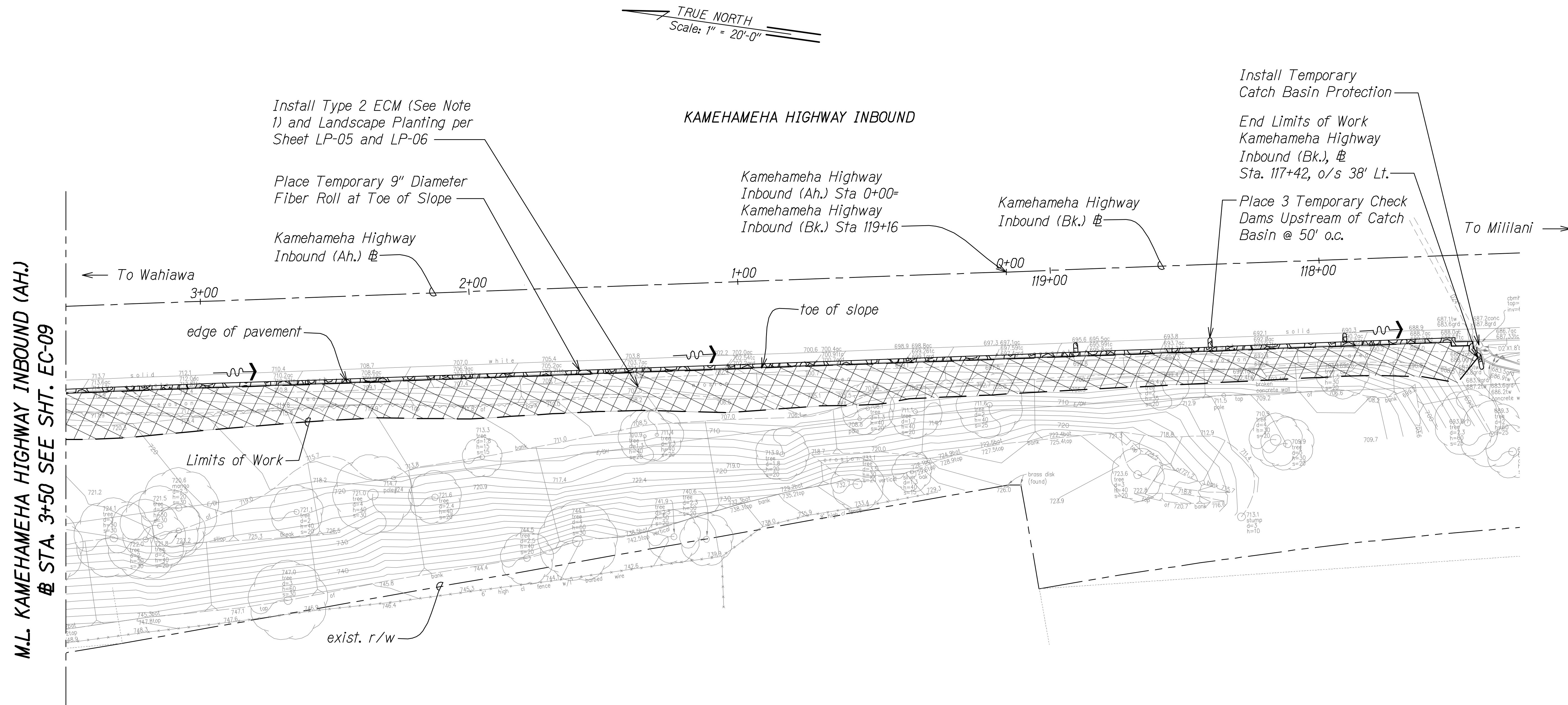
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN
PID 510
SLOPE IMPROVEMENTS FOR EROSION CONTROL
AT VARIOUS SITES ON OAHU, PHASE 7
Project No. HWY-O-04-16
Scale: 1" = 20' Date: January 2016

SHEET No. EC-09 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	23	55



TEMPORARY EROSION CONTROL AND PERMANENT BMP PLAN
PID 510
Scale: 1" = 20'-0"

- Notes:
1. Install ECM on slopes steeper than 3H:1V. Contractor shall field verify site conditions and ECM limits.
 2. For ECM details, see Sheets EC-01 & EC-02.
 3. For installation of ECM around obstacles, see Detail 5 on Sheet EC-01.
 4. See Landscaping Drawings for tree protection and removal.

SURVEY PLOTTED BY	DATE
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NOTE BOOK	
QUANTITIES BY	
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EXP. DATE

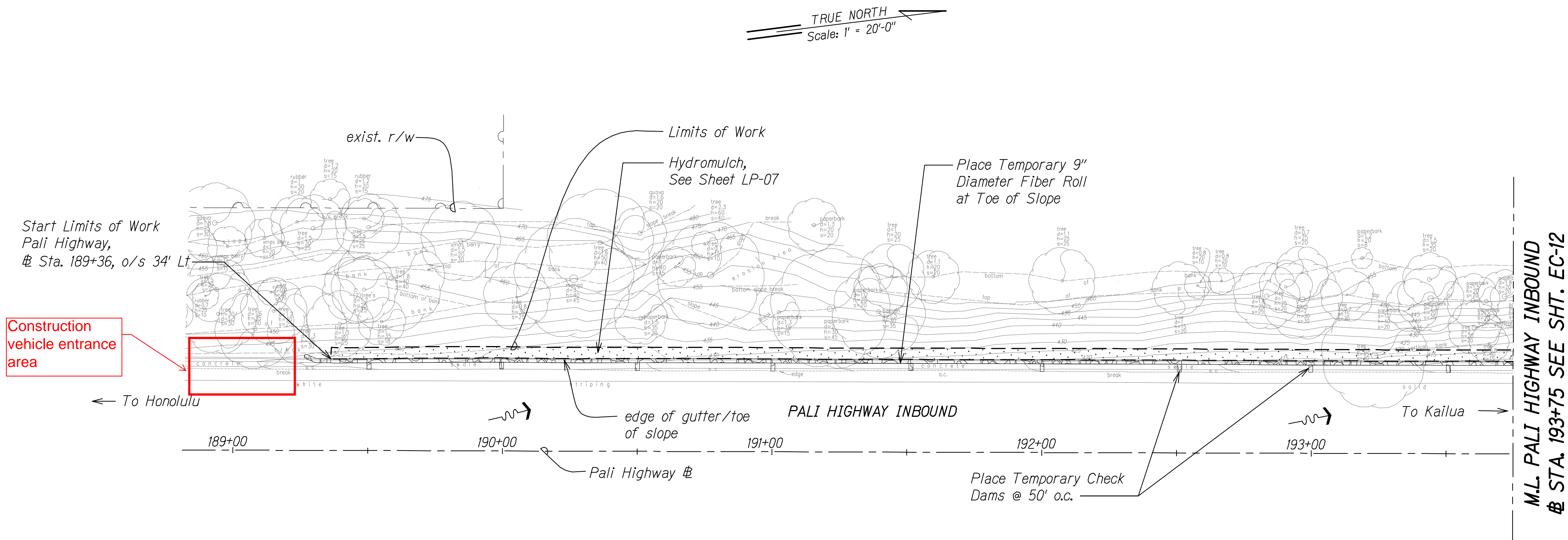
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN
PID 510
SLOPE IMPROVEMENTS FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 7
Project No. HWY-O-04-16
Scale: 1" = 20' Date: January 2016

SHEET No. EC-10 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	24	55



TEMPORARY EROSION CONTROL AND PERMANENT BMP PLAN
PID 474
Scale: 1" = 20'-0"

- Notes:
- See Landscaping Drawings for tree protection and removal.

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

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LICENSED PROFESSIONAL ENGINEER
NO. 9360-C
HAWAII USA

4/30/16
EXP. DATE

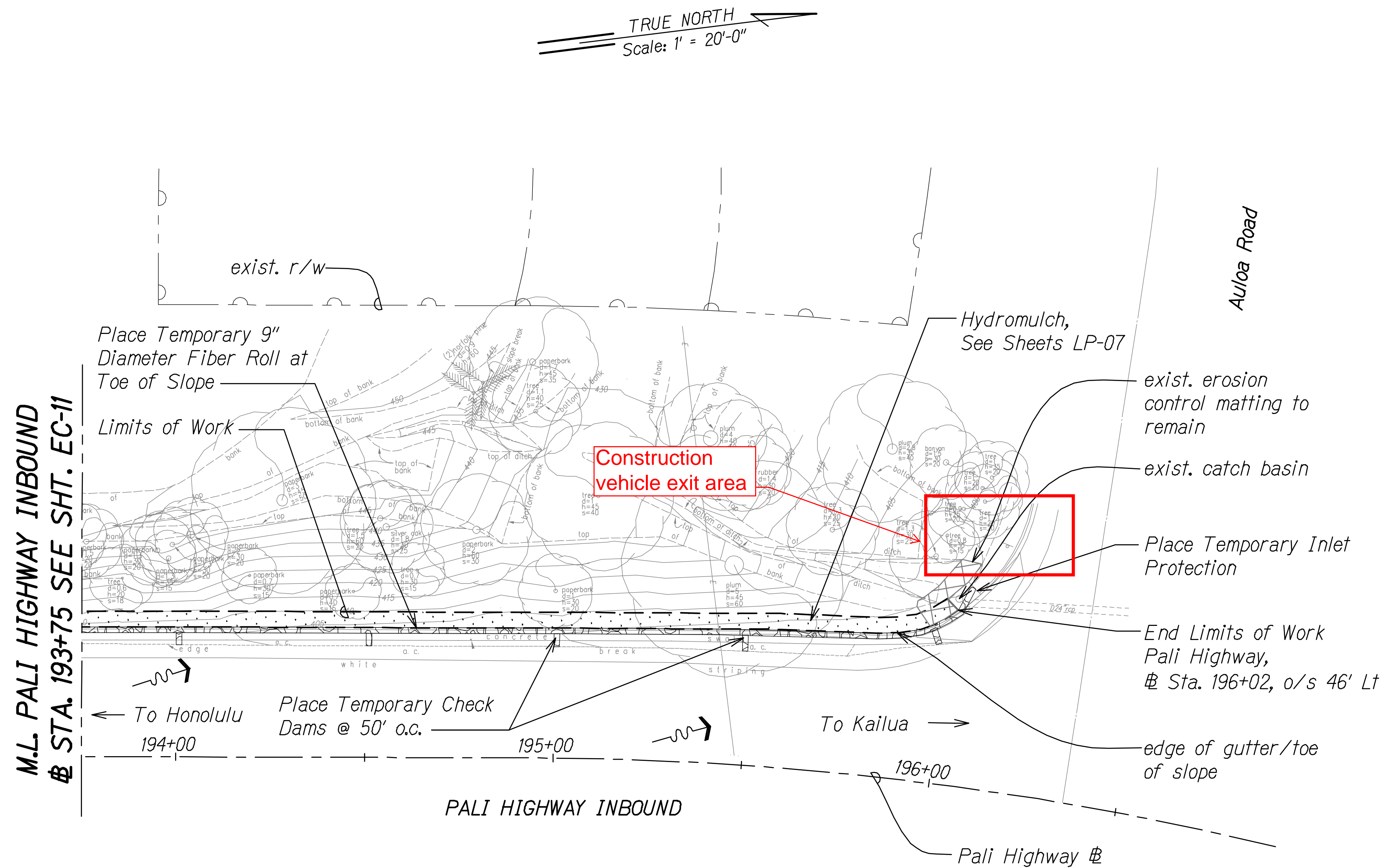
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN
PID 474
SLOPE IMPROVEMENTS FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 1
Project No. HWY-O-04-16
Scale: 1" = 20'-0" Date: January 2016

SHEET No. EC-11 OF 14 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	25	55



TEMPORARY EROSION CONTROL AND PERMANENT BMP PLAN
PID 474
Scale: 1" = 20'-0"

- Notes:
1. See Landscaping Drawings for tree protection and removal.

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

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LICENSED PROFESSIONAL ENGINEER

NO. 9360-C

HAWAII USA

4/30/16

EXP. DATE

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DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN

PID 474

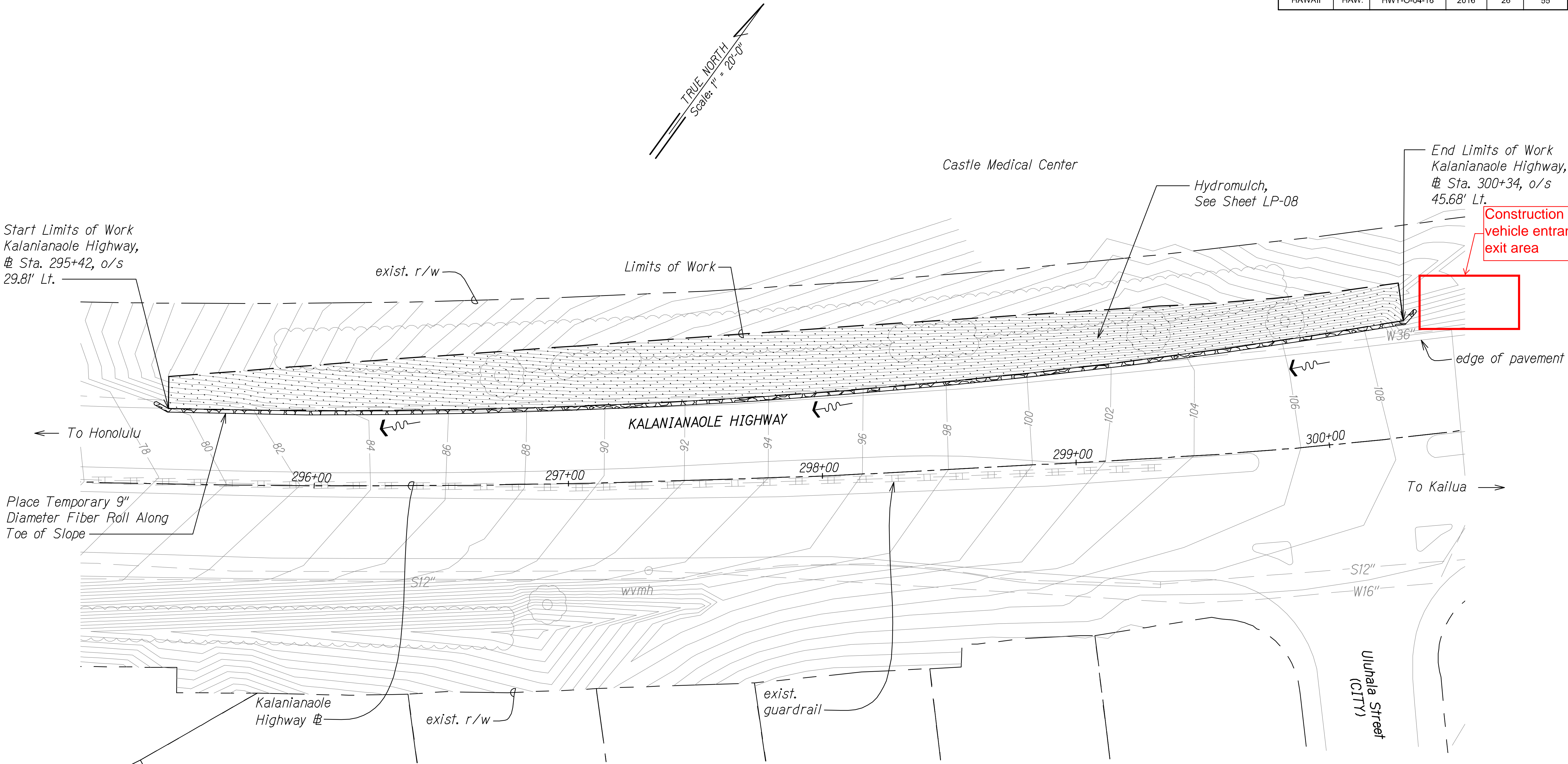
SLOPE IMPROVEMENTS FOR EROSION CONTROL

AT VARIOUS SITES ON OAHU, PHASE 7

Project No. HWY-O-04-16

Scale: 1" = 20'-0" Date: January 2016

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	26	55



TEMPORARY EROSION CONTROL AND PERMANENT BMP PLAN
PID 417

Scale: 1" = 20'-0"

- Notes:**
- See Landscaping Drawings for tree protection and removal.

ORIGINAL PLAN	DATE
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EXP. DATE

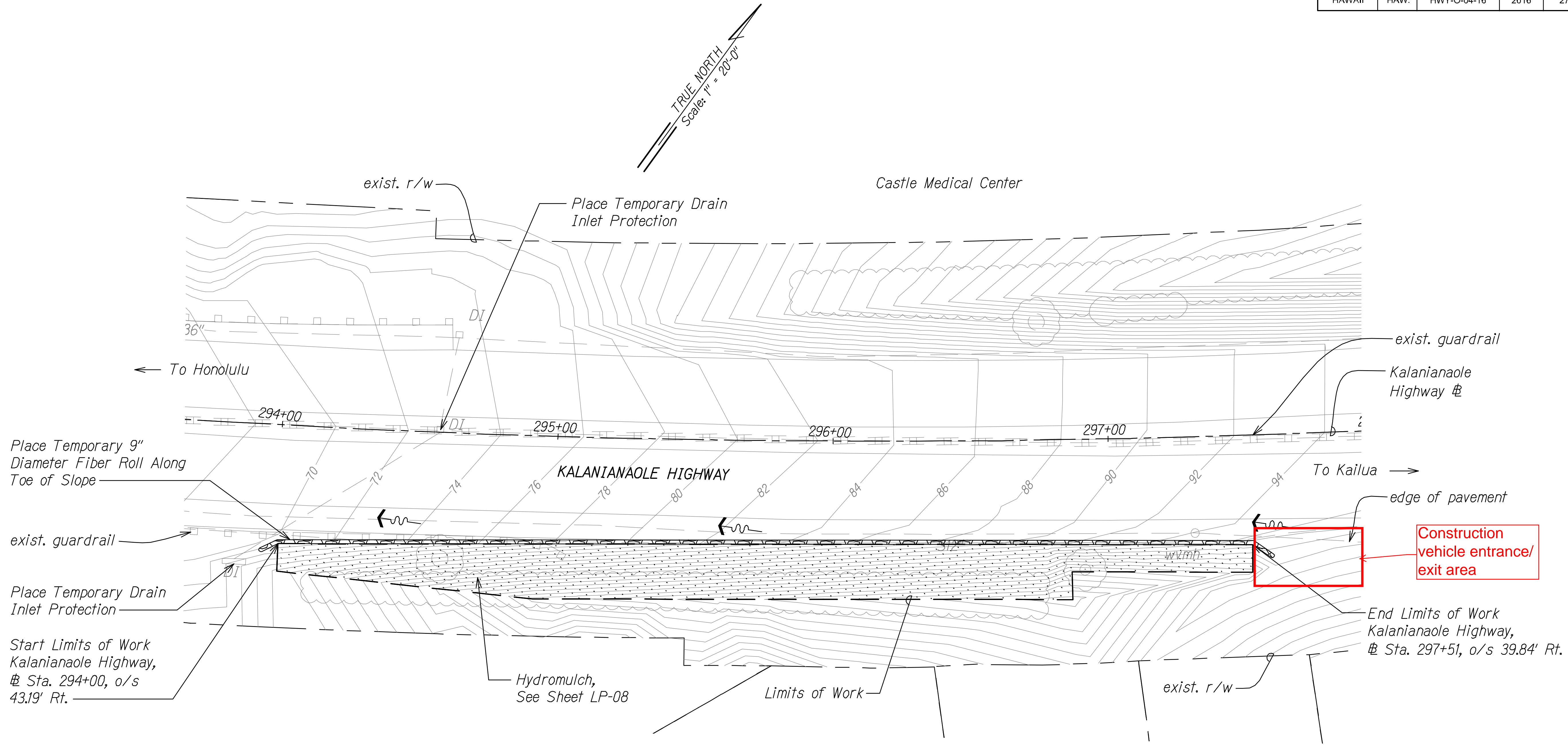
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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN
PID 417

SLOPE IMPROVEMENTS FOR EROSION CONTROL AT VARIOUS SITES ON OAHU, PHASE 1
Project No. HWY-O-04-16
Scale: 1" = 20' Date: January 2016

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-O-04-16	2016	27	55



TEMPORARY EROSION CONTROL AND PERMANENT BMP PLAN
PID 418
Scale: 1" = 20'-0"

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

- Notes:
- See Landscaping Drawings for tree protection and removal.

JASON H. LAU
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 NO. 9360-C
 HAWAII, USA
 4/30/16
 EXP. DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

TEMP. EC AND PERMANENT BMP PLAN

PID 418

SLOPE IMPROVEMENTS FOR EROSION CONTROL
 AT VARIOUS SITES ON OAHU, PHASE 7
 Project No. HWY-O-04-16
 Scale: 1" = 20' Date: January 2016