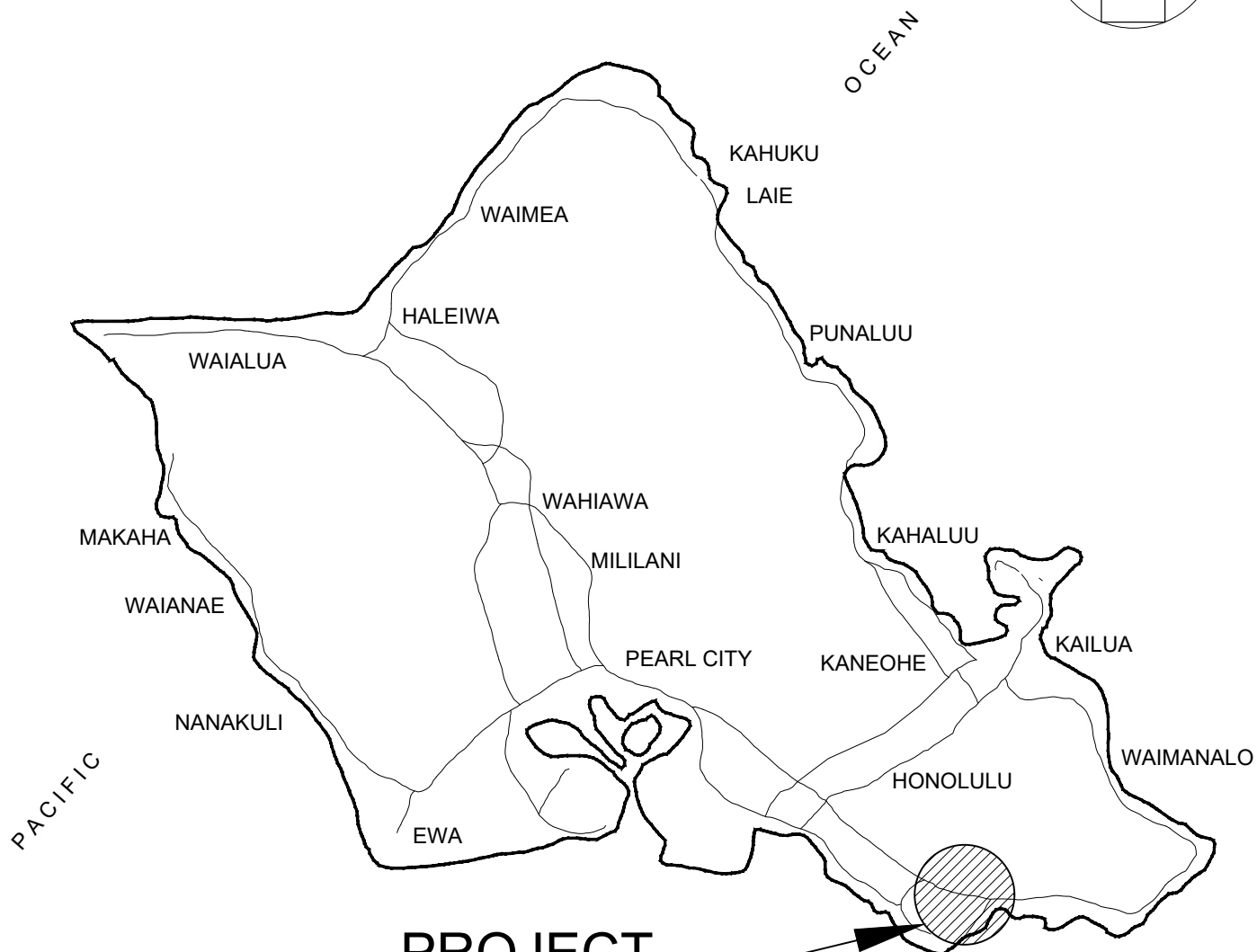
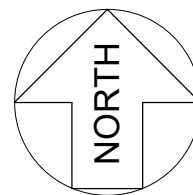




PROJECT
LOCATION

ISLAND OF OAHU

NOT TO SCALE

NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR

**REHABILITATION OF LOCALIZED STREETS -
PHASE 26A**

DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII

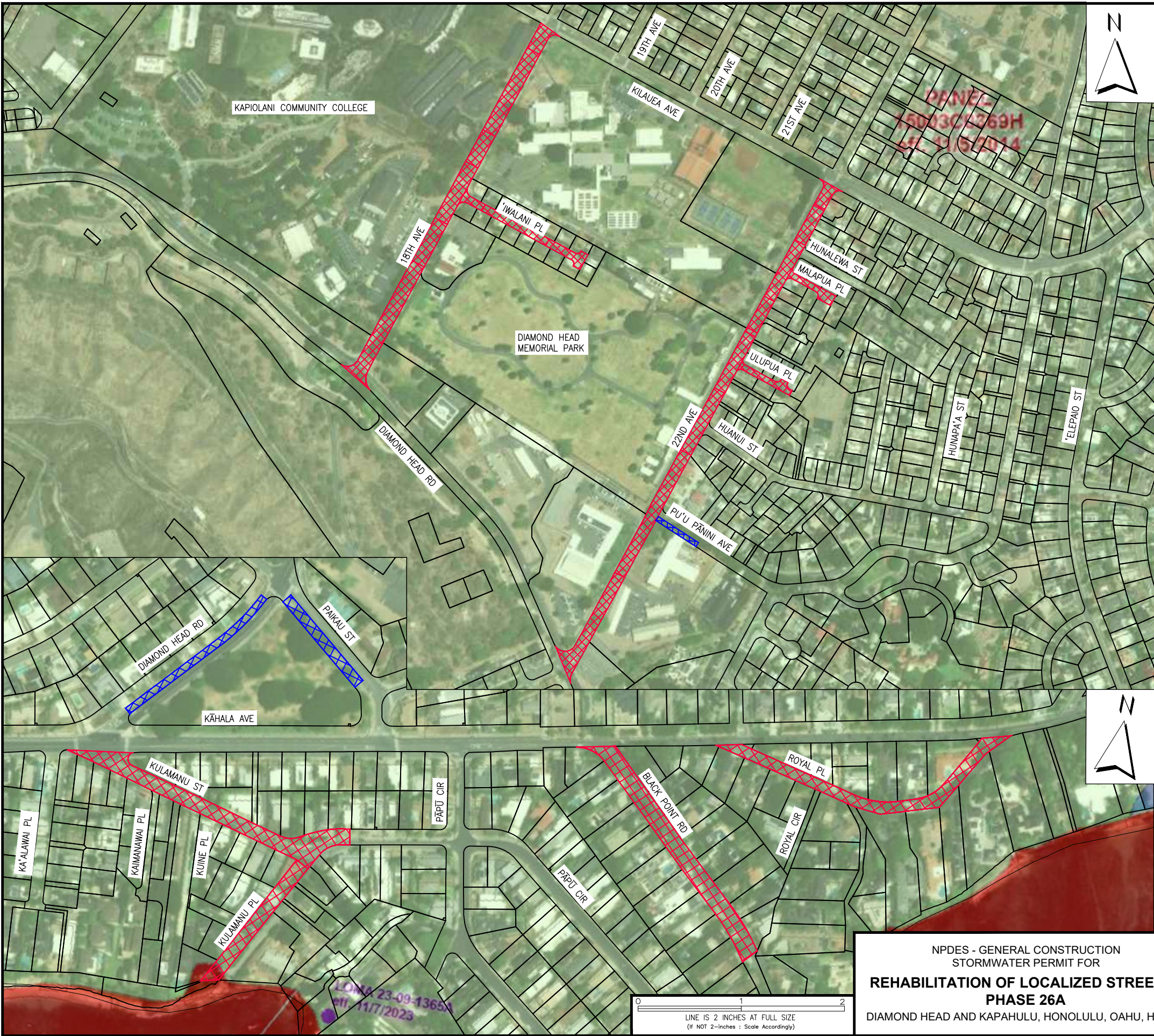
Austin Tsutsumi
& ASSOCIATES, INC.
Engineers & Surveyors

PROJECT VICINITY MAP

EXHIBIT

1

y:\2020\20-024 rehabilitation of streets\01s - phase 26a - kapahulu, kaimuki & kahala\engineering\NPDES\Exhibits\EXH-4 FLOOD HAZARD MAP - 1.dwg; May 12, 2025



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0369H

FIRM

FLOOD INSURANCE RATE MAP

CITY AND COUNTY OF HONOLULU, HAWAII

PANEL 369 OF 395

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HONOLULU, CITY AND COUNTY OF	150001	0369	H

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER

15003C0369H

MAP REVISED

NOVEMBER 5, 2014

Federal Emergency Management Agency

LEGEND:

- PROJECT AREA
- POSSIBLE STAGING AREA
- ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
- ZONE VE: COASTAL FLOOD ZONE WITH VELOCITY HAZARD (WAVE ACTION); BFE DETERMINED.

NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR
**REHABILITATION OF LOCALIZED STREETS -
PHASE 26A**
DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII

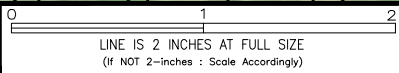
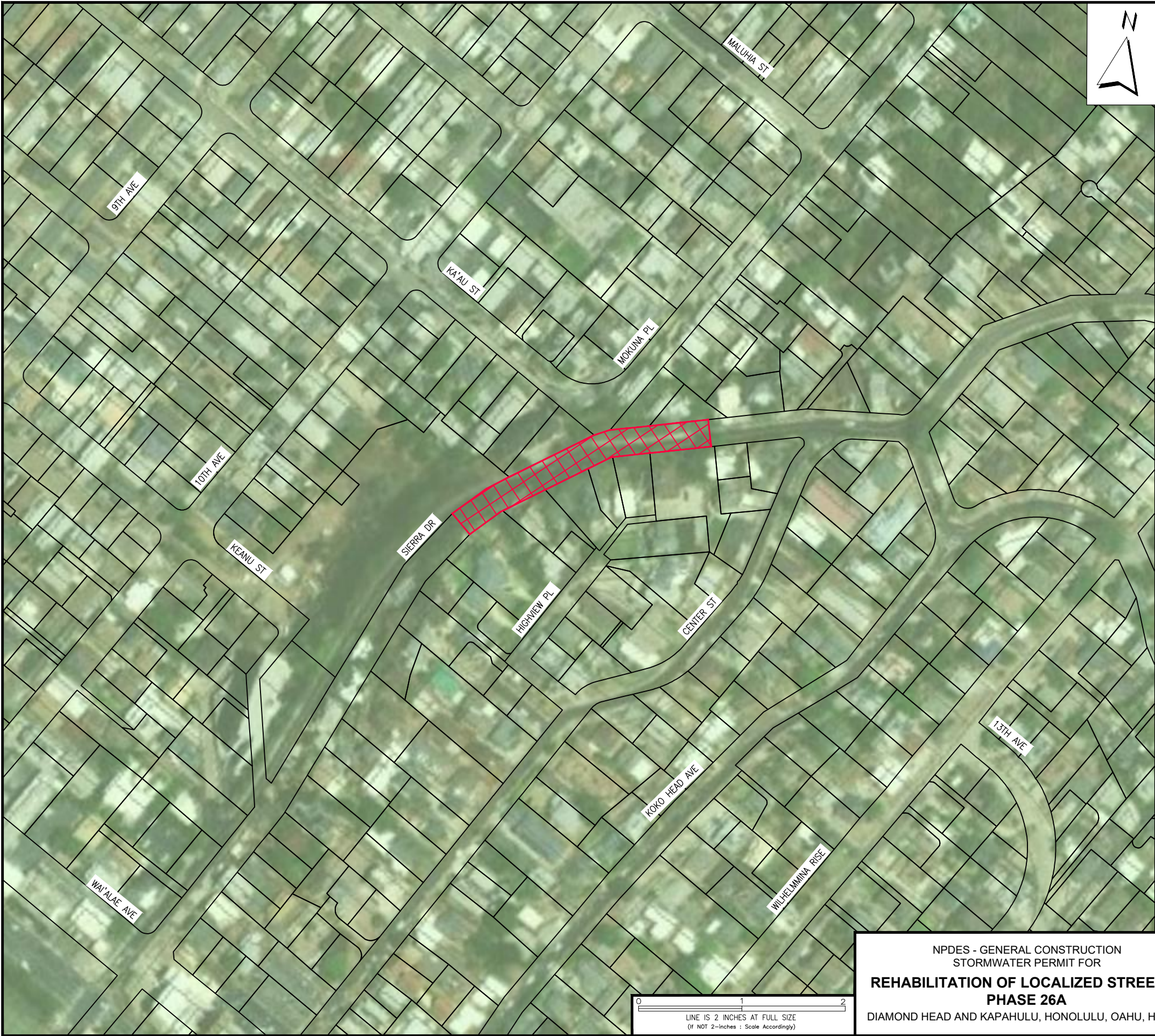
Austin Tsutsumi
& ASSOCIATES, INC.
Engineers & Surveyors

FLOOD HAZARD MAP - 1

EXHIBIT

4

y:\2020\20-024 rehabilitation of streets\pics - phase 26a - kapahulu, kaimuki & kahala\engineering\NPDES\Exhibits\EXH-5 FLOOD HAZARD MAP - 2.dwg; May 12, 2025



NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR
**REHABILITATION OF LOCALIZED STREETS -
PHASE 26A**
DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII

Austin Tsutsumi
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FLOOD HAZARD MAP - 2

EXHIBIT
5

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0367H

FIRM
FLOOD INSURANCE RATE MAP
CITY AND COUNTY OF
HONOLULU, HAWAII

PANEL 367 OF 395
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
HONOLULU, CITY AND COUNTY OF	150001	0367	H

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



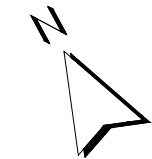
MAP NUMBER
15003C0367H

MAP REVISED
NOVEMBER 5, 2014
Federal Emergency Management Agency

LEGEND:

- PROJECT AREA
- ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

Y:\2020\20-024 rehabilitation of streets\01 - phase 26a - kapahulu, kaimuki & kahala\engineering\NPDES\Exhibits\EXH-6 FLOOD HAZARD MAP - 3.dwg; May 12, 2025



NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0366G

FIRM
FLOOD INSURANCE RATE MAP
CITY AND COUNTY OF
HONOLULU,
HAWAII
PANEL 366 OF 395
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
HONOLULU CITY AND 150001 0366 G
COUNTY OF

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.


MAP NUMBER 15003C0366G
MAP REVISED JANUARY 19, 2011
Federal Emergency Management Agency

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0369H

FIRM
FLOOD INSURANCE RATE MAP
CITY AND COUNTY OF
HONOLULU, HAWAII
PANEL 369 OF 395
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)
CONTAINS:
COMMUNITY NUMBER PANEL SUFFIX
HONOLULU CITY AND 150001 0369 H
COUNTY OF

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.


MAP NUMBER 15003C0369H
MAP REVISED NOVEMBER 5, 2014
Federal Emergency Management Agency

LEGEND:

-  PROJECT AREA
-  POSSIBLE STAGING AREA
-  ZONE X: AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR
**REHABILITATION OF LOCALIZED STREETS -
PHASE 26A**
DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII

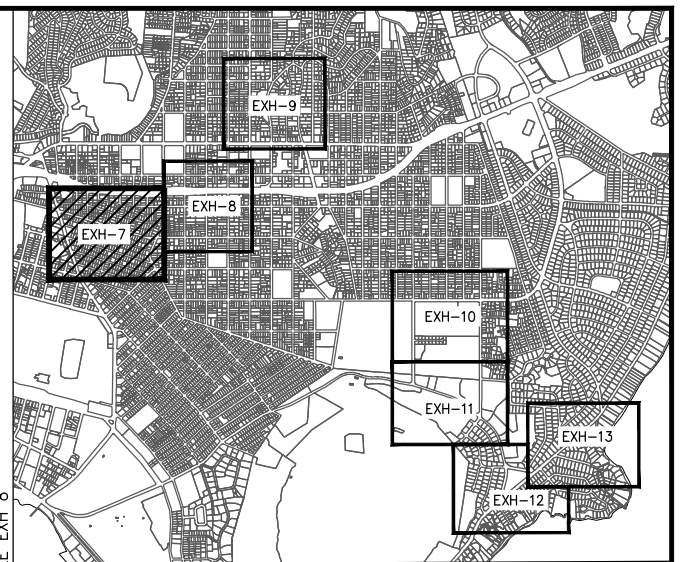
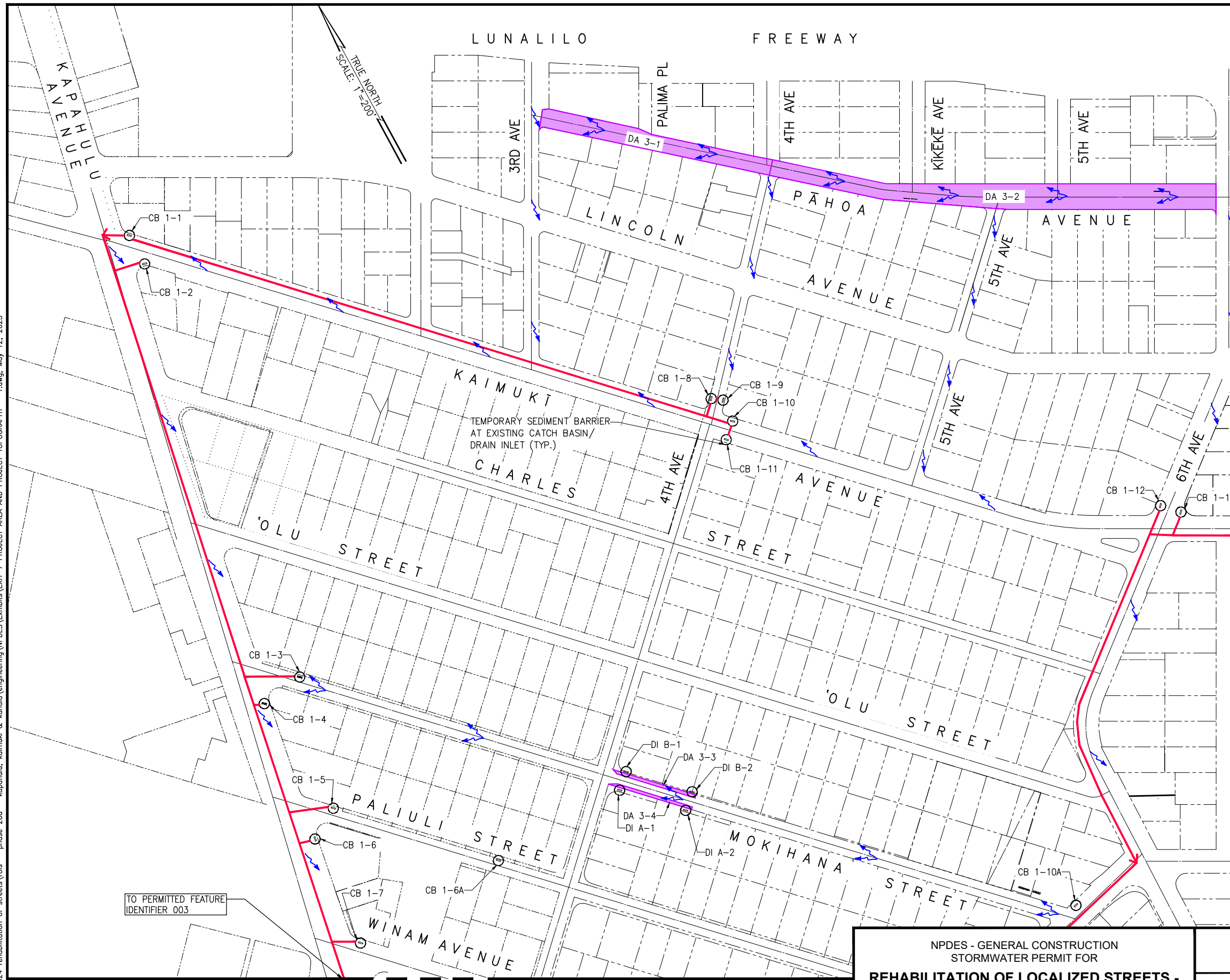
 **Austin Tsutsumi**
& ASSOCIATES, INC.
Engineers & Surveyors

FLOOD HAZARD MAP - 3

EXHIBIT

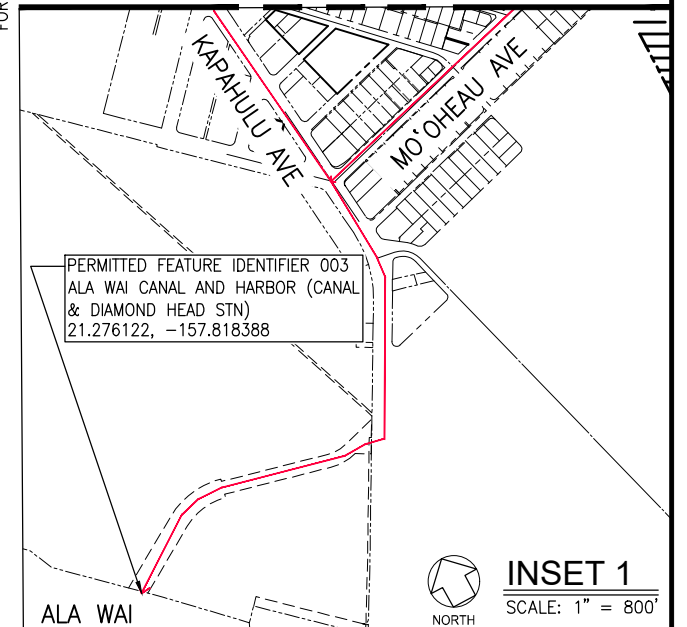
6

y:\2020\20-024 rehabilitation of streets\vol 1 - kapahulu, kaimuki & kahala\engineering\NPDES\Exhibits\EXH-7 PROJECT AREA AND PROJECT TOPOGRAPHY - 1.dwg; May 12, 2025



MATCH LINE
FOR CONTINUATION, SEE EXH 8

KEY PLAN
SCALE: N.T.S.
FOR CONTINUATION, SEE LEFT
MATCH LINE



LEGEND:

- | | | | |
|--|---|--|-----------------|
| | TEMPORARY SEDIMENT BARRIER AT EXISTING AND PROPOSED CATCH BASIN/DRAIN INLET | | DRAINAGE AREA 4 |
| | DIRECTION FROM INLET TO DISCHARGE POINT | | DRAINAGE AREA 5 |
| | DIRECTION OF SURFACE FLOW | | DRAINAGE AREA 6 |
| | DRAINAGE AREA 1 | | DRAINAGE AREA 7 |
| | DRAINAGE AREA 2 | | |
| | DRAINAGE AREA 3 | | |

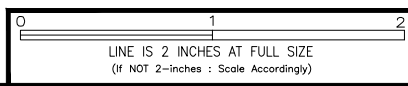
NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR
**REHABILITATION OF LOCALIZED STREETS -
PHASE 26A**
DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII

Austin Tsutsumi
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Engineers & Surveyors

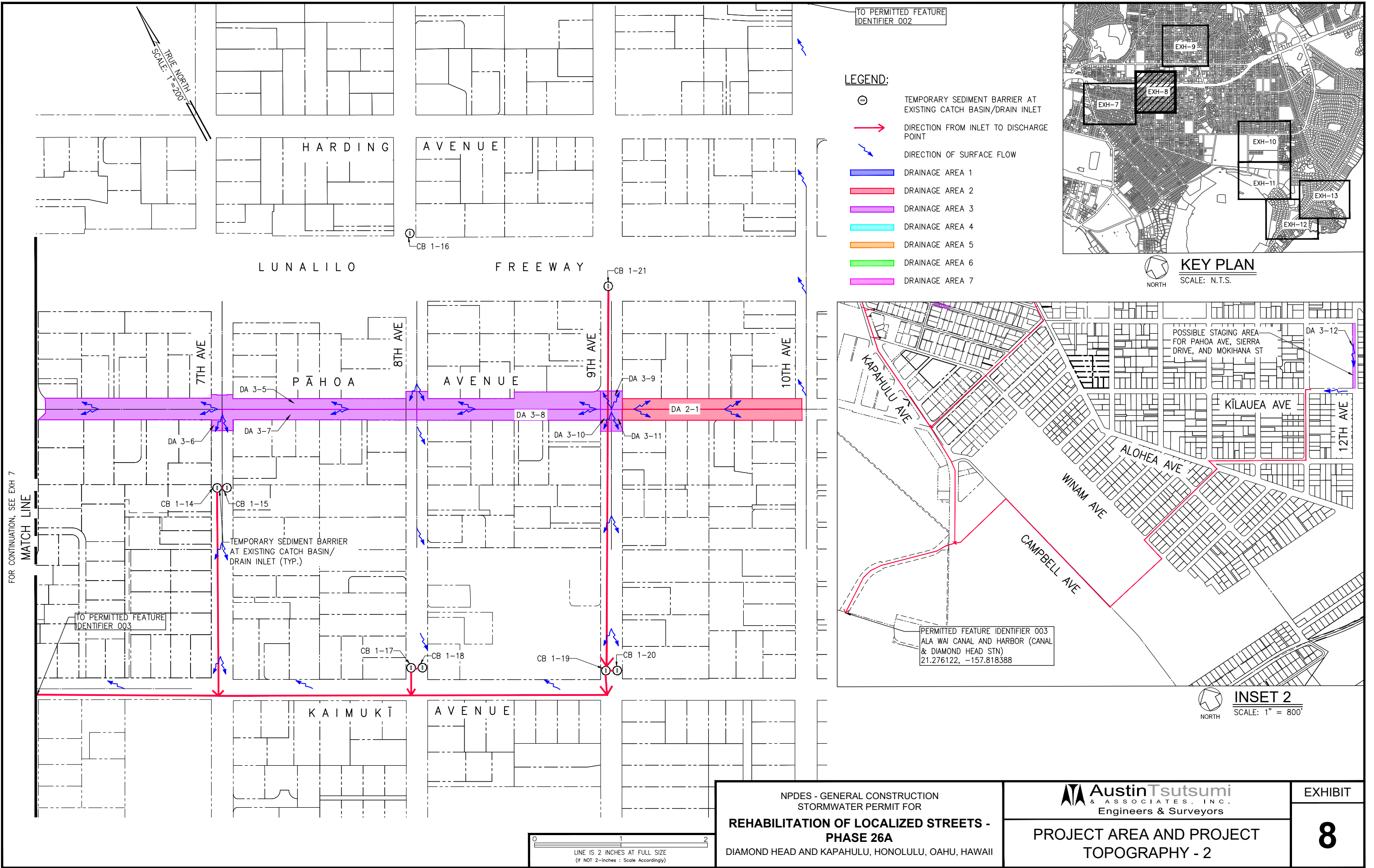
**PROJECT AREA AND PROJECT
TOPOGRAPHY MAP - 1**

EXHIBIT
7

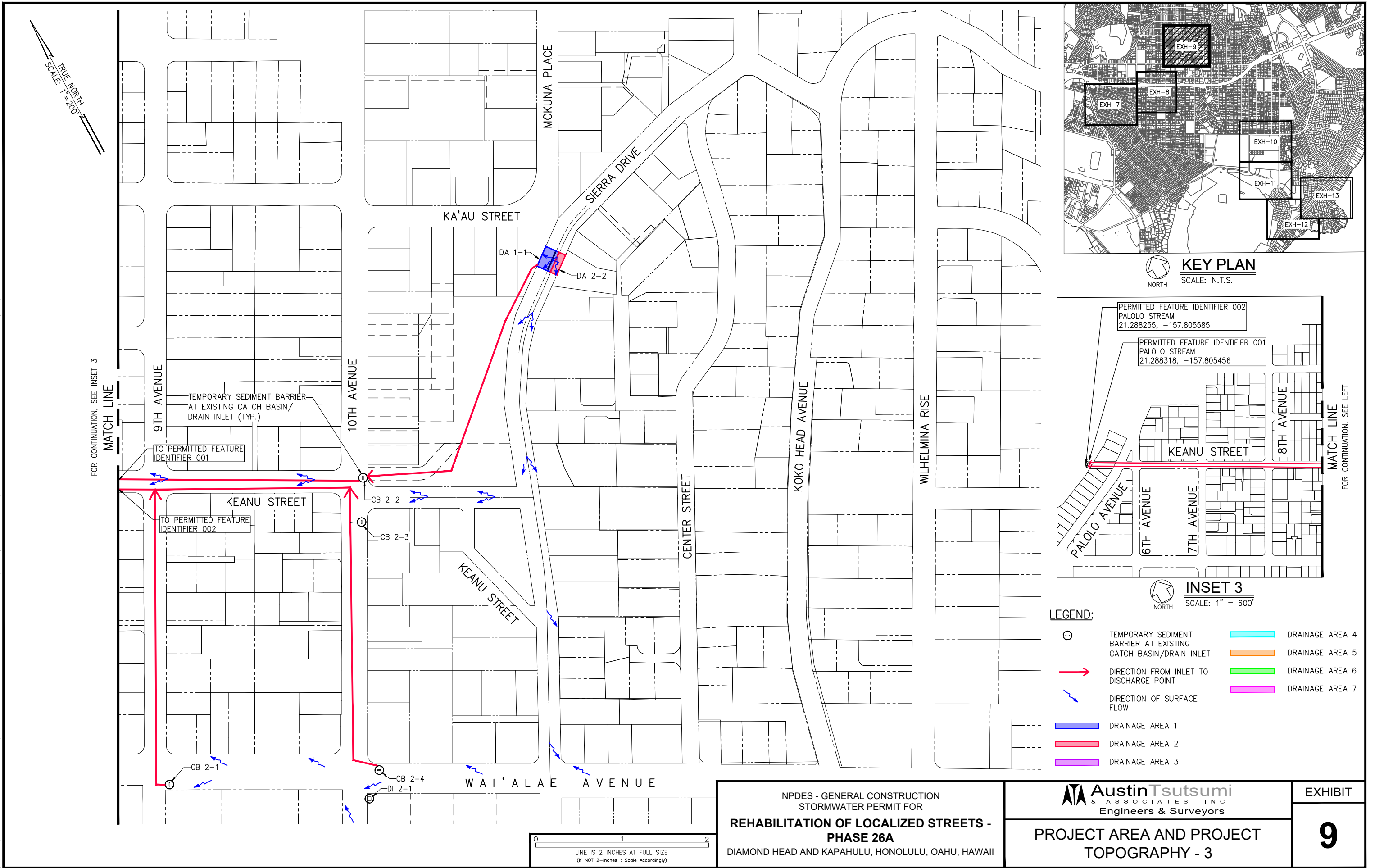
MATCH LINE
FOR CONTINUATION, SEE INSET 1



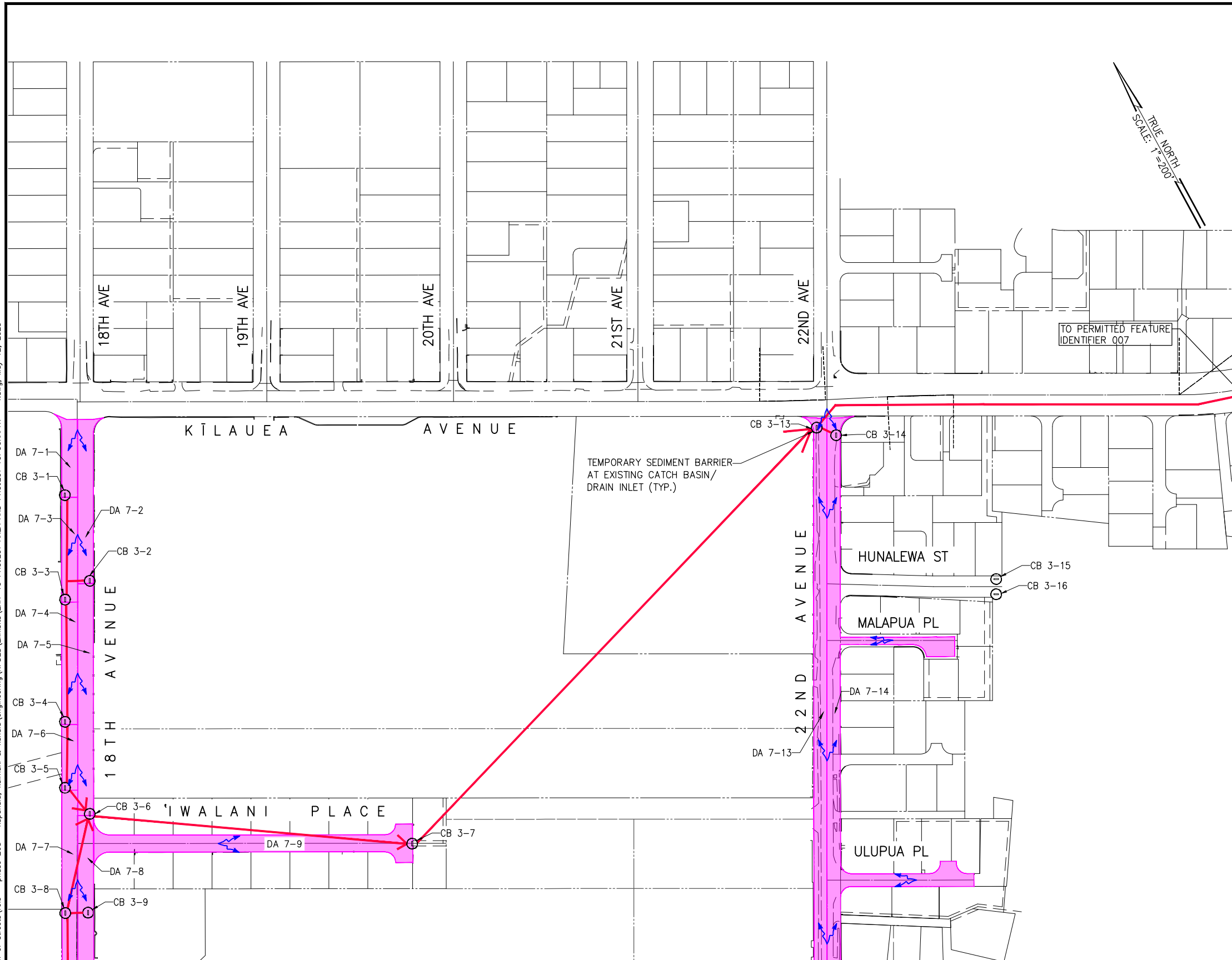
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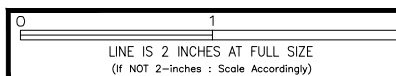
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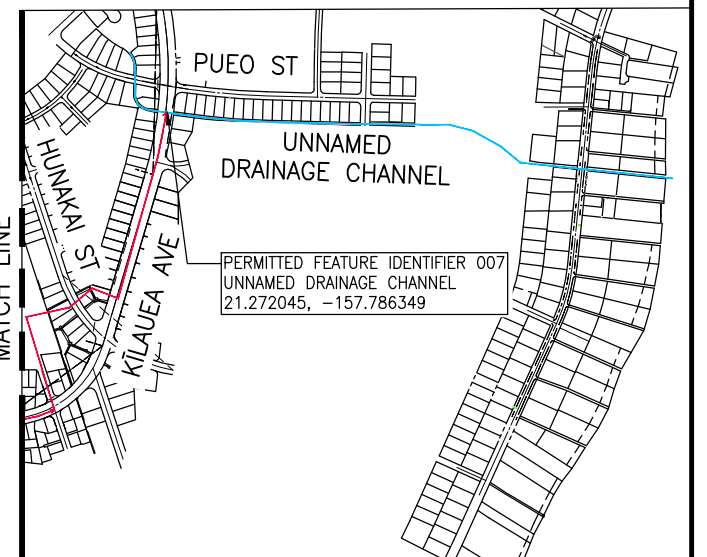
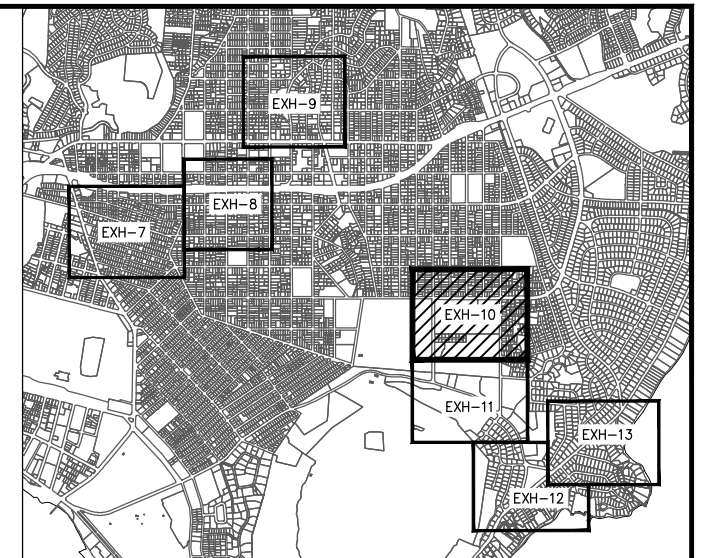
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MATCH LINE
FOR CONTINUATION, SEE EXH 11



NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR
**REHABILITATION OF LOCALIZED STREETS -
PHASE 26A**
DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII



LEGEND:

- | | | | |
|--|--|--|-----------------|
| | TEMPORARY SEDIMENT BARRIER AT EXISTING CATCH BASIN/DRAIN INLET | | DRAINAGE AREA 4 |
| | DIRECTION FROM INLET TO DISCHARGE POINT | | DRAINAGE AREA 5 |
| | DIRECTION OF SURFACE FLOW | | DRAINAGE AREA 6 |
| | DRAINAGE AREA 1 | | DRAINAGE AREA 7 |
| | DRAINAGE AREA 2 | | CHANNEL |
| | DRAINAGE AREA 3 | | |

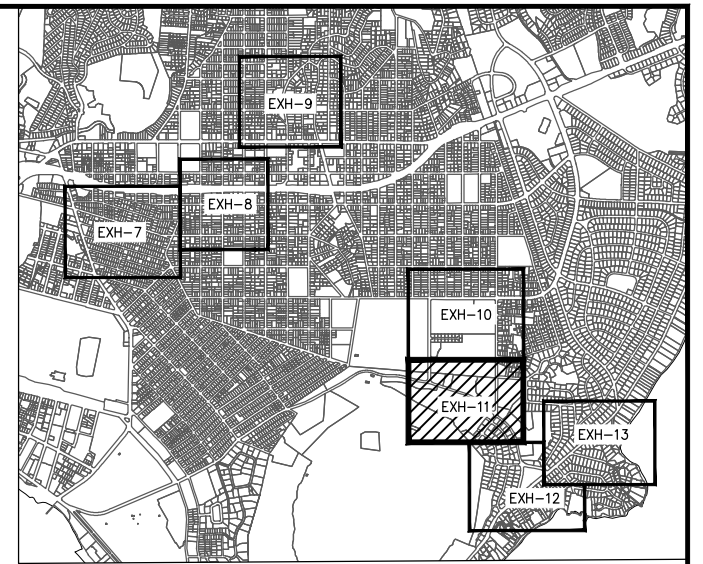
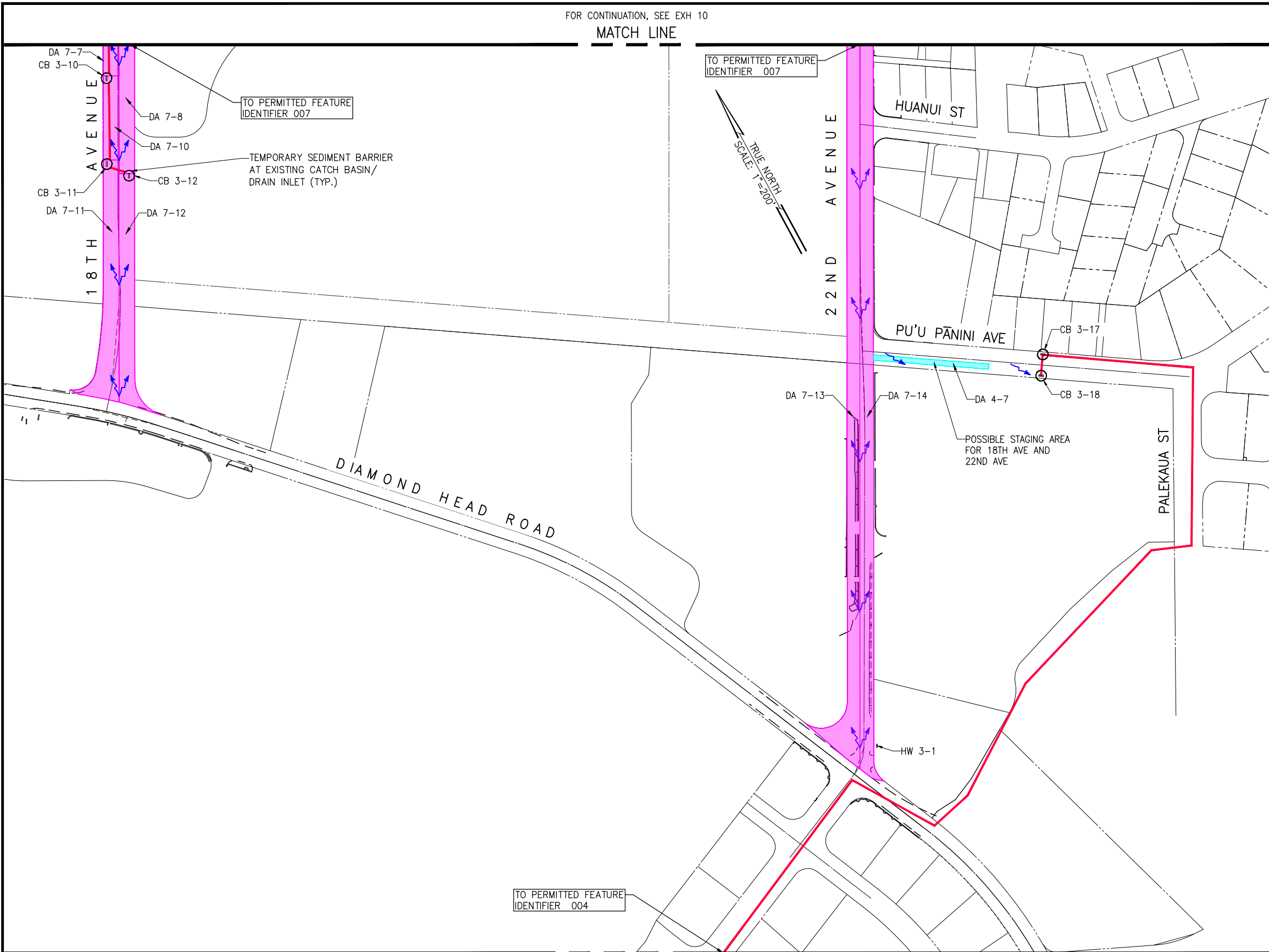
Austin Tsutsumi
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**PROJECT AREA AND PROJECT
TOPOGRAPHY - 4**

EXHIBIT

10

y:\2020\20-024 rehabilitation of streets\ols - phase 26a - kapahulu, kaimuki & kahala\engineering\NPDES\Exhibits\EXH-11 PROJECT AREA AND PROJECT TOPOGRAPHY - 5.dwg; May 12, 2025



KEY PLAN
SCALE: N.T.S.

LEGEND:

-  TEMPORARY SEDIMENT BARRIER AT EXISTING CATCH BASIN/DRAIN INLET
-  DIRECTION FROM INLET TO DISCHARGE POINT
-  DIRECTION OF SURFACE FLOW
-  DRAINAGE AREA 1
-  DRAINAGE AREA 2
-  DRAINAGE AREA 3
-  DRAINAGE AREA 4
-  DRAINAGE AREA 5
-  DRAINAGE AREA 6
-  DRAINAGE AREA 7

MATCH LINE
FOR CONTINUATION, SEE EXH 12



NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR
**REHABILITATION OF LOCALIZED STREETS -
PHASE 26A**
DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII

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**PROJECT AREA AND PROJECT
TOPOGRAPHY - 5**

EXHIBIT
11

y:\2020\20-024 rehabilitation of streets\ols - phase 26a - kapahulu, kaimuki & kahala\engineering\NPDES\Exhibits\EXH-12 PROJECT AREA AND PROJECT TOPOGRAPHY - 6.dwg; May 12, 2025

FOR CONTINUATION, SEE EXH 11

MATCH LINE

TRUE NORTH
SCALE: 1"=200'

POSSIBLE STAGING AREA FOR
KULAMANU ST, BLACK POINT RD,
AND ROYAL PL

PAIKAU ST

KAHALA AVENUE

KULAMANU STREET

PAPU CIR

POKA ST

DIAMOND HEAD ROAD

PALAOA PL

KALAWAI PL

KAIMANAWAI PL

KUINE PL

KULAMANU PL

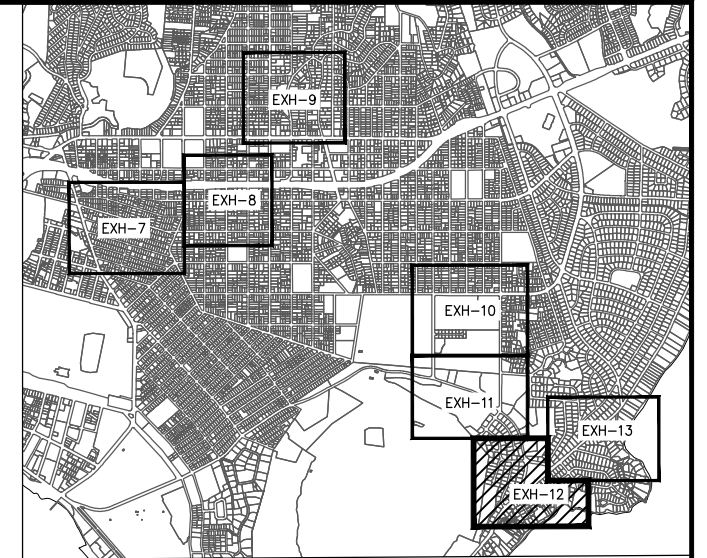
PERMITTED FEATURE IDENTIFIER 004
KA'ALAWAI BEACH
21.257058, -157.796764

PERMITTED FEATURE IDENTIFIER 005
KA'ALAWAI BEACH
21.257013, -157.796747

NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR

REHABILITATION OF LOCALIZED STREETS -
PHASE 26A

DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII



KEY PLAN

SCALE: N.T.S.

LEGEND:



TEMPORARY SEDIMENT BARRIER AT EXISTING CATCH
BASIN/DRAIN INLET



DIRECTION FROM INLET TO DISCHARGE POINT



DIRECTION OF SURFACE FLOW



DRAINAGE AREA 1



DRAINAGE AREA 2



DRAINAGE AREA 3



DRAINAGE AREA 4



DRAINAGE AREA 5



DRAINAGE AREA 6



DRAINAGE AREA 7

0 1 2
LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

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PROJECT AREA AND PROJECT
TOPOGRAPHY - 6

EXHIBIT

12

y:\2020\20-024 rehabilitation of streets\ols - phase 26a - kapahulu, kaimuki & kahala\engineering\NPDES\Exhibits\EXH-13 PROJECT AREA AND PROJECT TOPOGRAPHY - 7.dwg; May 12, 2025

FOR CONTINUATION, SEE EXH 12

MATCH LINE

MATCH LINE
FOR CONTINUATION, SEE EXH 12

0 1 2
LINE IS 2 INCHES AT FULL SIZE
(If NOT 2-inches : Scale Accordingly)

NPDES - GENERAL CONSTRUCTION
STORMWATER PERMIT FOR
**REHABILITATION OF LOCALIZED STREETS -
PHASE 26A**
DIAMOND HEAD AND KAPAHULU, HONOLULU, OAHU, HAWAII

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**PROJECT AREA AND PROJECT
TOPOGRAPHY - 7**

EXHIBIT

13



PERMITTED FEATURE IDENTIFIER 006
KAHALA BEACH
21.258371, -157.788926

LEGEND:

- ⊖ TEMPORARY SEDIMENT BARRIER AT EXISTING CATCH BASIN/DRAIN INLET
- DIRECTION FROM INLET TO DISCHARGE POINT
- ↘ DIRECTION OF SURFACE FLOW
- DA 1 DRAINAGE AREA 1
- DA 2 DRAINAGE AREA 2
- DA 3 DRAINAGE AREA 3
- DA 4 DRAINAGE AREA 4
- DA 5 DRAINAGE AREA 5
- DA 6 DRAINAGE AREA 6
- DA 7 DRAINAGE AREA 7

