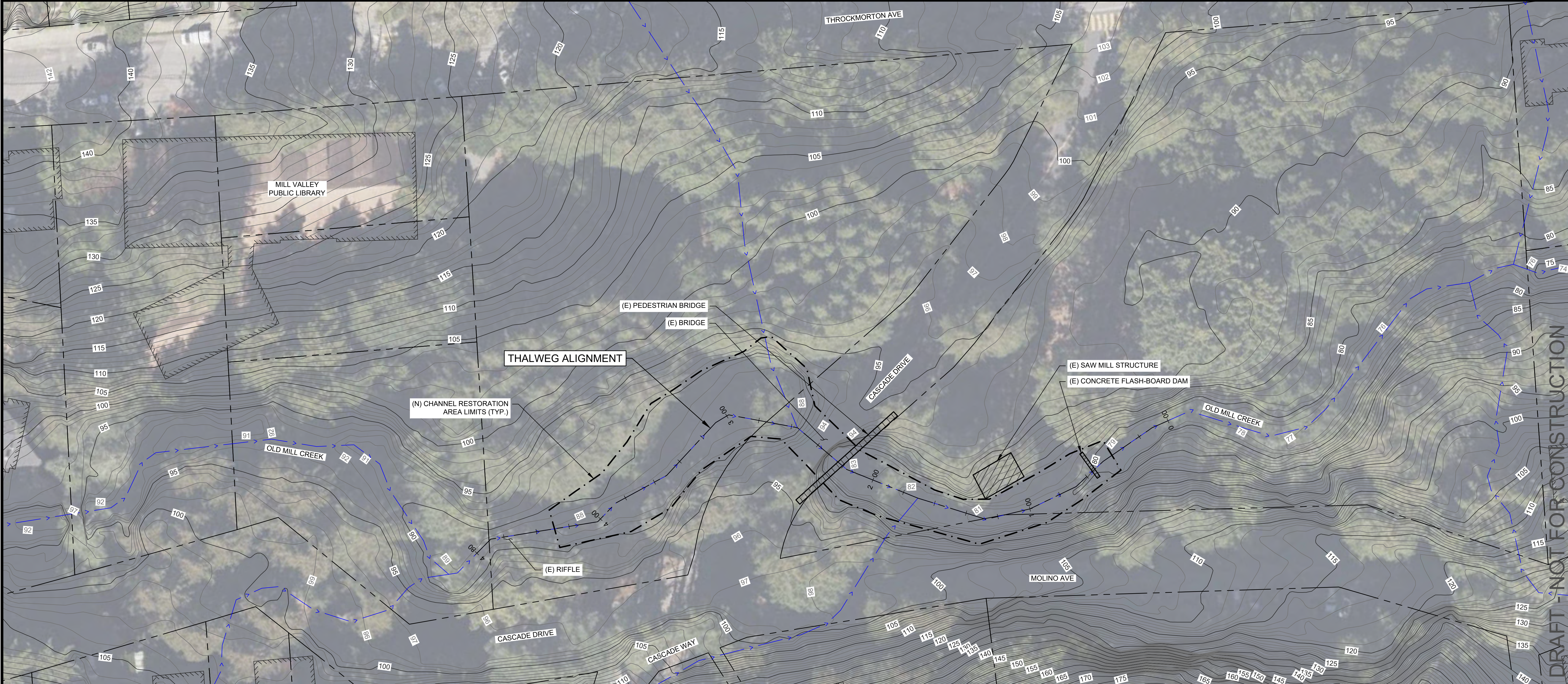




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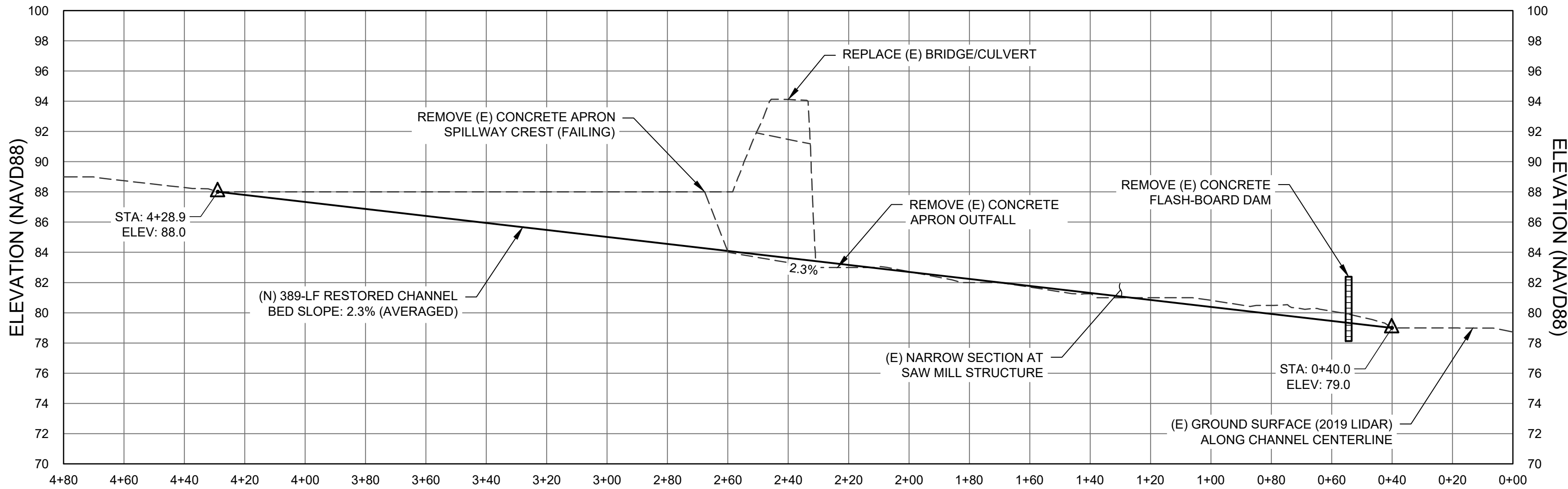
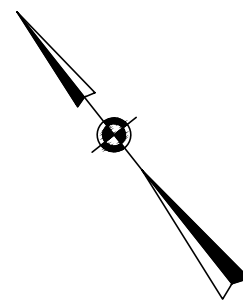
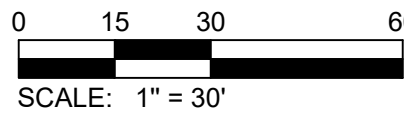
- EXISTING CONTOURS
- EXISTING NHD FLOWLINE
- EXISTING PROPERTY BOUNDARY LINE (FROM MARINMAP GIS, APPROX.)
- EXISTING BUILDING LINE (FROM MARINMAP GIS, APPROX.)

GENERAL NOTES

- TOPOGRAPHIC LIDAR MAPPING WAS PERFORMED BY: QUANTUM SPATIAL, INC. FOR THE GOLDEN GATE NATIONAL PARKS CONSERVANCY 1100 NE CIRCLE BLVD, STE. 126 LIDAR SURVEY DATES: 12/22/2018 TO 3/15/2019. REFER TO MARIN COUNTY, CALIFORNIA QL1 LIDAR TECHNICAL DATA REPORT (DATED 7 NOV 2019)
- ELEVATION DATUM: NAVD88 (GEOID 12A) PER QUANTUM SPATIAL, INC.
- BASIS OF BEARINGS: NAD83 (2011) CALIFORNIA STATE PLANE, ZONE 3 (FIPS 0403) PER QUANTUM SPATIAL, INC.
- CONTOUR INTERVAL IS ONE FOOT. ELEVATIONS AND DISTANCES SHOWN ARE IN DECIMAL FEET.
- THIS IS NOT A BOUNDARY SURVEY. PROPERTY LINES SHOWN ARE APPROXIMATED FROM PUBLIC DATA SOURCES (MARINMAP GIS).
- AERIAL IMAGE FROM AUTOCAD CIVIL 3D (BING MAPS)

FISH PASSAGE RESTORATION PLAN DESIGN ALTERNATIVE 1

SCALE: 1" = 30'



THALWEG PROFILE DESIGN ALTERNATIVE 1

SCALE: H:1" = 30'; V:1"=6" (5X EXAGGERATION)

Revisions:

Cascade Drive
Mill Valley, CA 94941
A.P.N. 028-091-09 & 028-102-12
Client: City of Mill Valley

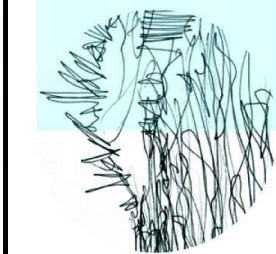
FISH PASSAGE RESTORATION PLAN ALTERNATIVE 1

OLD MILL CREEK

FISH PASSAGE RESTORATION PROJECT

Geomorph DESIGN
2100 Fourth Street, No. 154
San Rafael, CA 94901
(510) 218-1064
www.geomorphdesign.com

geomorphDESIGN



Date:
30 JAN 2023

Design by:
MS

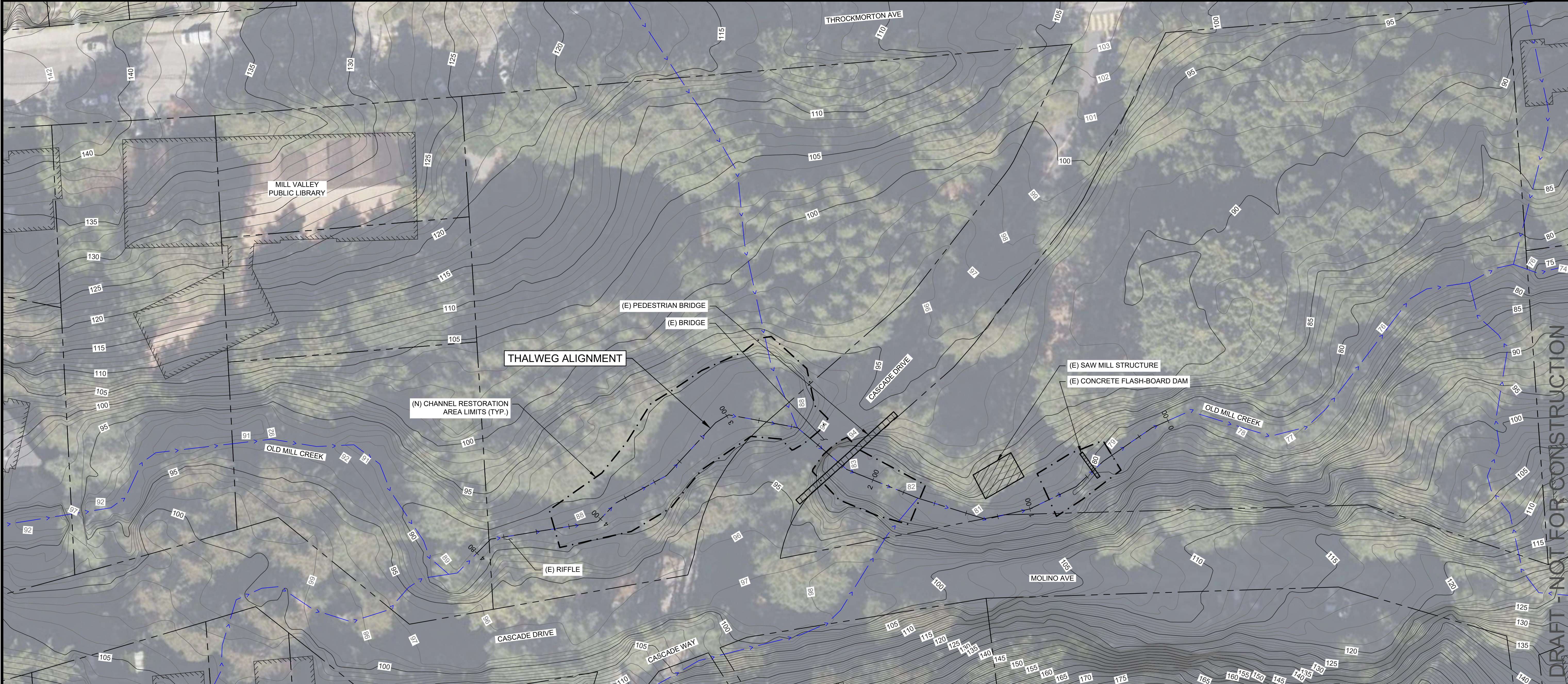
Drawn by:
BRS

Checked by:
MS

Scale:
1" = 30'

CONCEPTUAL
DESIGN PLAN

C1



LEGEND

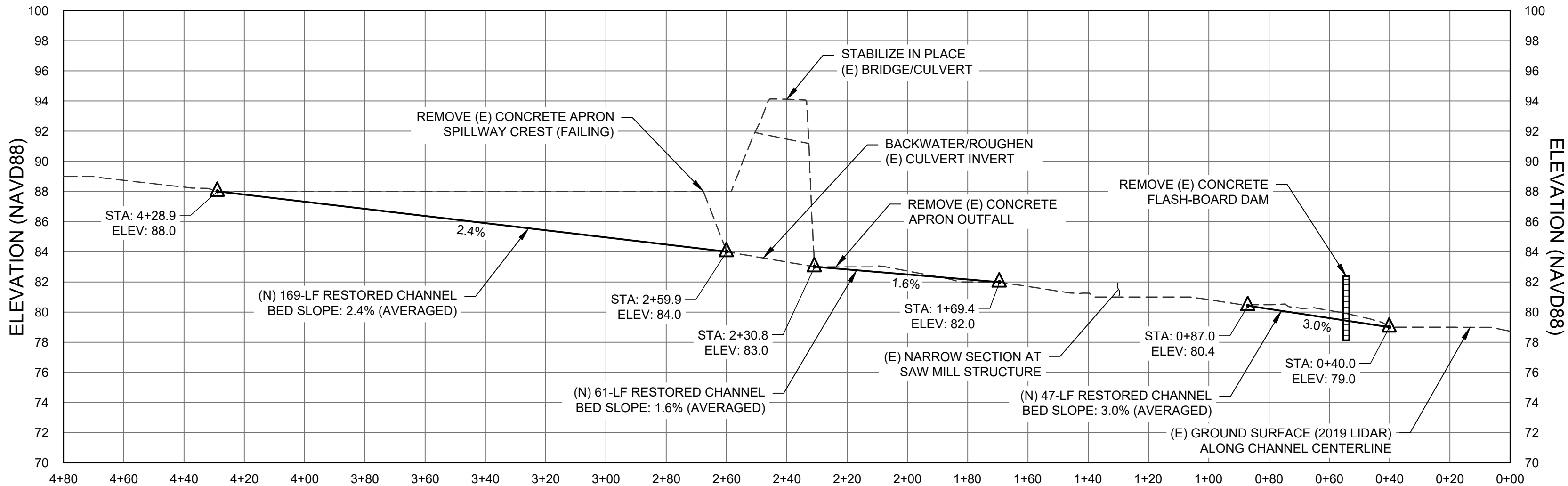
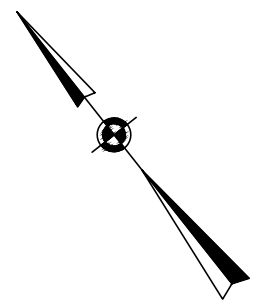
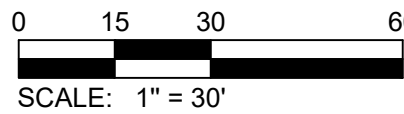
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FISH PASSAGE RESTORATION PLAN DESIGN ALTERNATIVE 2

SCALE: 1" = 30'



NOTE: LIDAR ELEVATIONS DO NOT CONTAIN BED ELEVATIONS OCCURRING BELOW WATER SURFACES IN POOLS UPSTREAM AND DOWNSTREAM FROM BRIDGE.

THALWEG PROFILE DESIGN ALTERNATIVE 2

SCALE: H:1" = 30'; V:1"=6" (5X EXAGGERATION)

DESIGN ALTERNATIVE 2

- REMOVE CONCRETE APRON AT INLET AND OUTLET OF (E) CULVERT.
- STABILIZE IN PLACE (E) BRIDGE/CULVERT STRUCTURE.
- CONSTRUCT NEW RESTORED 169-LF BANKFULL WIDTH STEP-POOL CHANNEL UPSTREAM FROM CULVERT INLET.
- CONSTRUCT NEW RESTORED 61-LF BANKFULL WIDTH STEP-POOL CHANNEL DOWNSTREAM FROM CULVERT OUTLET.
- BACKWATER/ROUGHEN (E) CULVERT INVERT AS NEEDED FOR SUITABLE PASSAGE.
- REMOVE (E) CONCRETE FLASH-BOARD DAM.
- CONSTRUCT 47-LF RESTORED BANKFULL WIDTH STEP-POOL CHANNEL BED AT DAM REMOVAL SITE.

Revisions:

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Client: City of Mill Valley

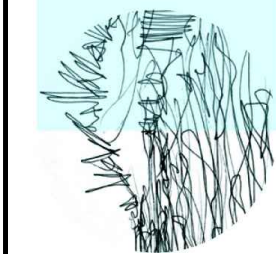
FISH PASSAGE RESTORATION PLAN ALTERNATIVE 2

OLD MILL CREEK

FISH PASSAGE RESTORATION PROJECT

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geomorphDESIGN



Date:
30 JAN 2023

Design by:
MS

Drawn by:
BRS

Checked by:
MS

Scale:
1" = 30'

CONCEPTUAL
DESIGN PLAN

C2