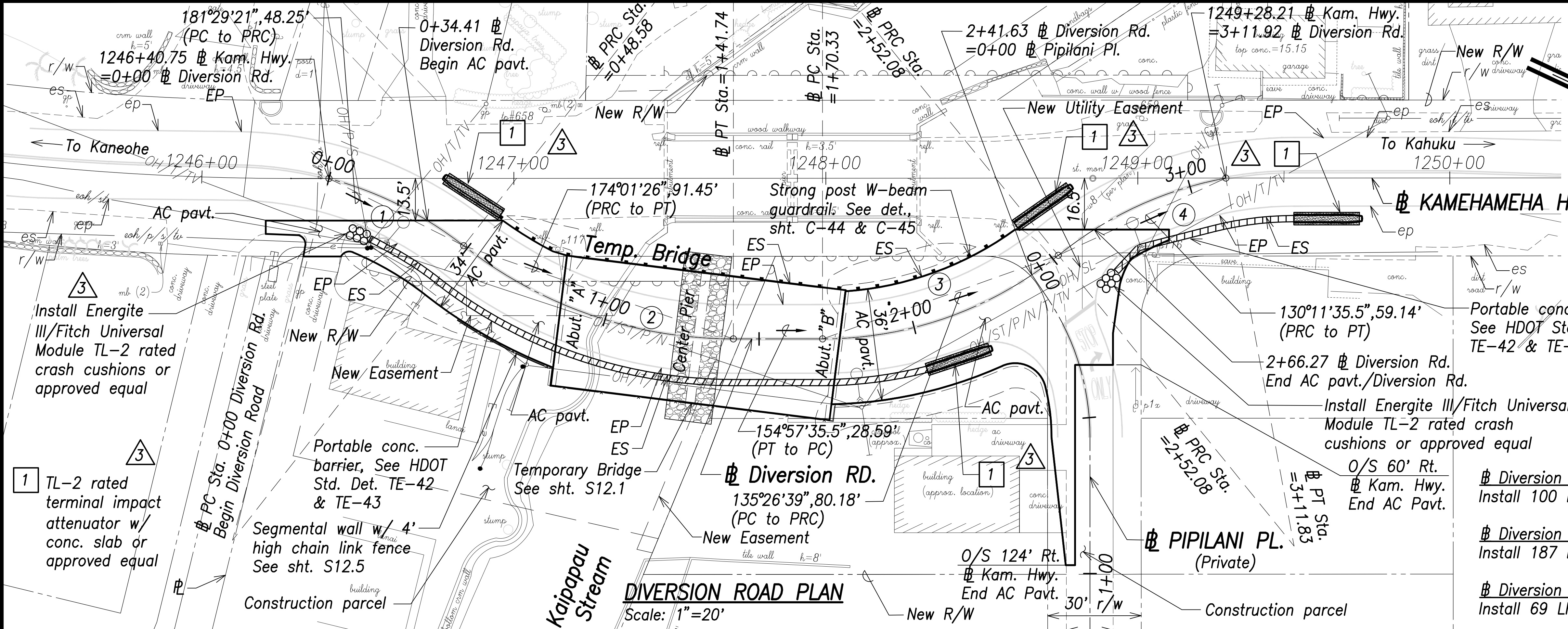
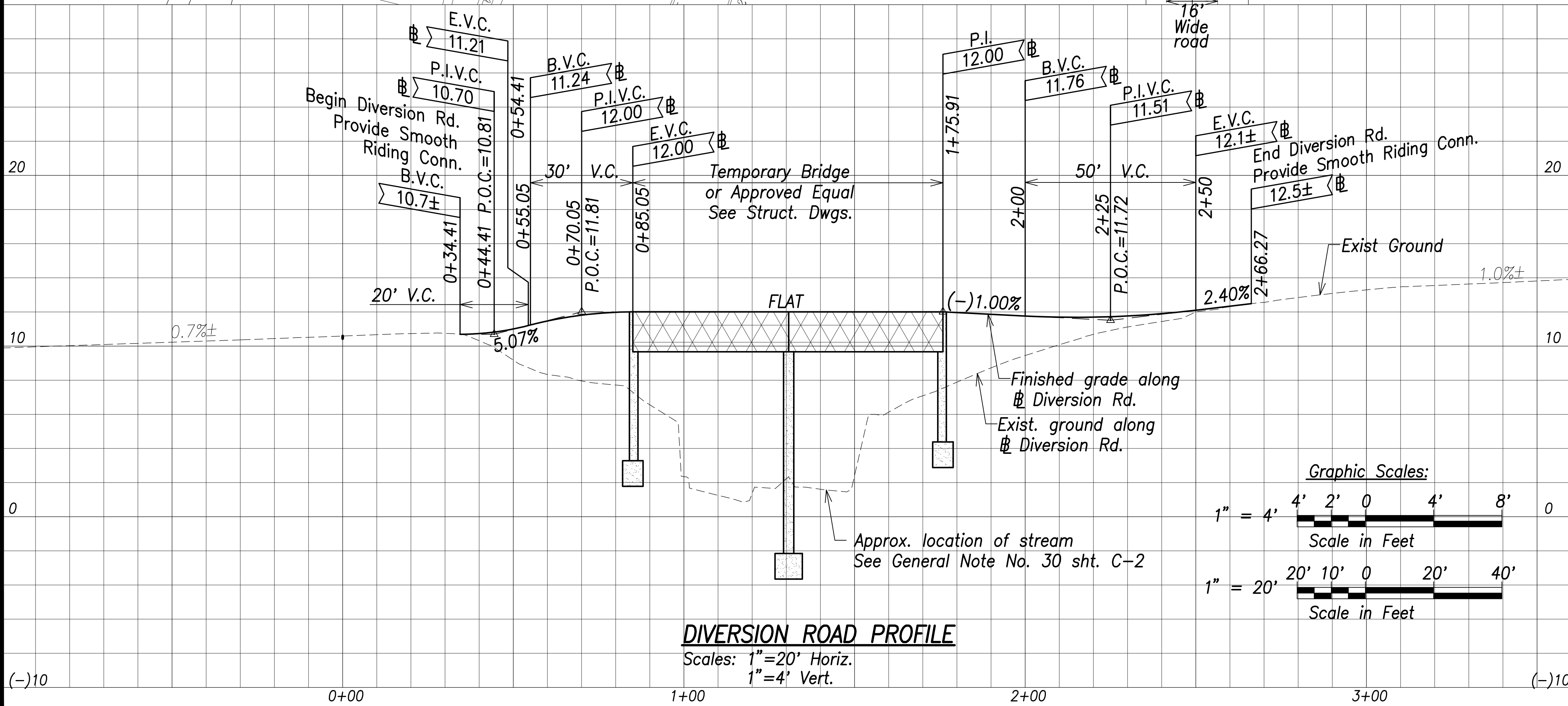




FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-083-1(48)	2021	ADD. 30	161

Diversion Rd. # Curve Data	
①	②
$\Delta=23^{\circ}11'51"$ $\Delta/2=11^{\circ}35'55.5"$ $R=120.00'$ $T=24.63'$ $C=48.25'$ $Lc=48.58'$	$\Delta=38^{\circ}07'41"$ $\Delta/2=19^{\circ}03'50.5"$ $R=140.00'$ $T=48.38'$ $C=91.45'$ $Lc=93.16'$
③	④
$\Delta=39^{\circ}01'53"$ $\Delta/2=19^{\circ}30'56.5"$ $R=120.00'$ $T=42.53'$ $C=80.18'$ $Lc=81.75'$	$\Delta=28^{\circ}31'46"$ $\Delta/2=14^{\circ}15'53"$ $R=120.00'$ $T=30.51'$ $C=59.14'$ $Lc=59.75'$
# Diversion Rd. Sta. 0+53 to # Diversion Rd. Sta. 2+53 Install 100 LF strong post W-Beam guardrail on Mauka side.	
# Diversion Rd. Sta. 0+21 to # Diversion Rd. Sta. 2+08 Install 187 LF Portable conc. barrier on Makai side.	
# Diversion Rd. Sta. 2+65 to # Diversion Rd. Sta. 3+34 Install 69 LF Portable conc. barrier Makai side.	



- Notes:**
1. The contractor shall adjust the tops of all existing boxes and structures as required to construct the Diversion Road. Adjustment of boxes and structures shall be considered incidental to the various items of work.
 2. Portable concrete barriers shall be anchored to protect the temporary waterline. Contractor to provide shop drawings for anchoring the portable concrete barriers on the temporary bridge.
 3. Contractor to provide shop drawings for terminal impact attenuators and crash cushions.
 4. Diversion road design shown in the contract documents are for bidding purposes. The contractor shall be responsible for the diversion road design based upon their means and methods and construction sequence taking into consideration the existing site conditions.

WALTER G. C. CHONG
LICENSED PROFESSIONAL ENGINEERS
No. 8982-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION. "OBSERVATION OF CONSTRUCTION" IS DEFINED IN CHAPTER 16-115, HAWAII ADMINISTRATIVE RULES, ENTITLED "PROFESSIONAL ENGINEERS, ARCHITECTS, SURVEYORS AND LANDSCAPE ARCHITECTS."

SIGNATURE
R. M. TOWILL CORPORATION

7/21/21

DATE

Rev. Callouts for Quadguards to "terminal impact attenuators w/conc. slab. or approved equal". Add. notes 3 & 4

REVISION

Scale: As Noted

Date: February 2021