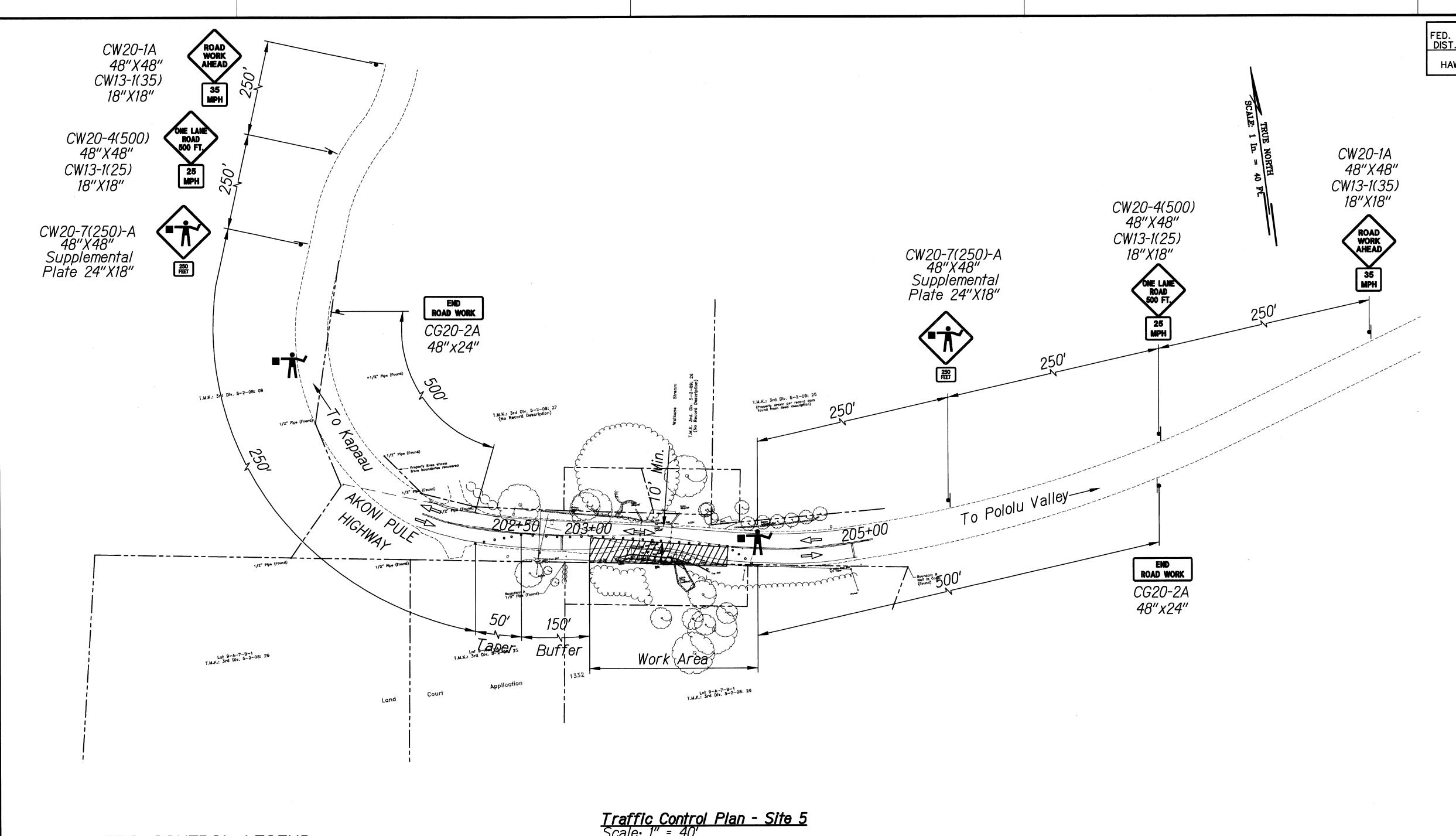


41R



FISCAL SHEET YEAR NO. FED. ROAD STATE DIST. NO. FED. AID PROJ. NO. 2009 ER-15(19) HAWAII HAW.

NOTES:

- 1. Contractor shall use same traffic control for work on the makai (south) lane by mirroring in the opposite direction.
- 2. Contractor to provide access to existing driveways at all times.
- 3. One lane closure traffic control plan shall be used for working hours only. Contractor shall provide a rideable surface and restore two lanes of traffic at the end of work day.
- 4. Contractor shall coordinate with the State in the event that two (2) lanes of traffic cannot be met.
- 5. Contractor to submit to Engineer for approval the detour Traffic Control Plans for non-working hours. Refer to Section 645 of the Special Provisions.

Traffic Control Plan - Site 5
Scale: 1" = 40'

TRAFFIC CONTROL LEGEND:

Sign

Direction Of Traffic

Cone Or Delineator

///////// Work Area

Police Officer or Flagman

GRAPHICAL SCALES:

SCALE: 1" = 40'

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

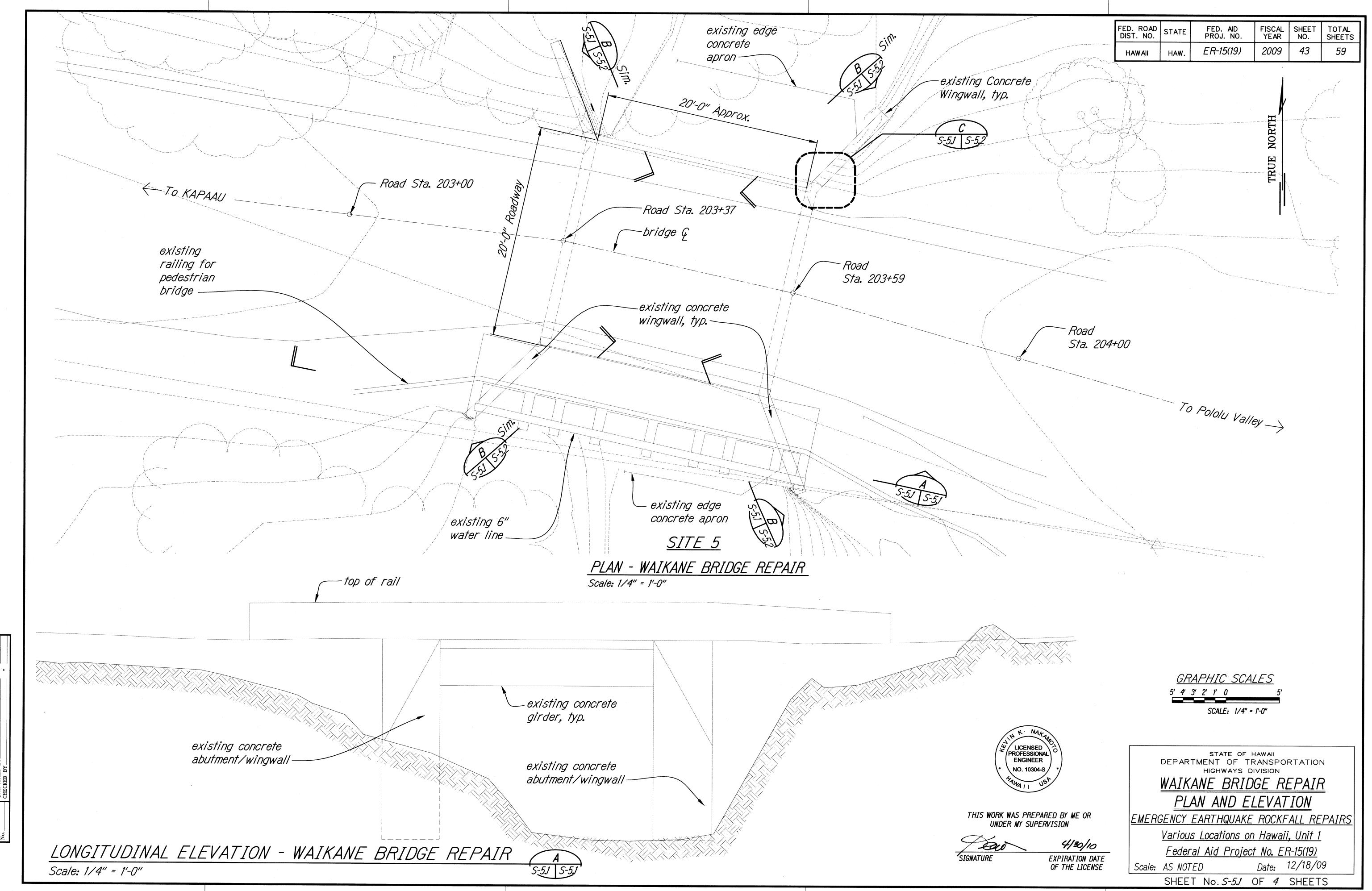
04/30/10 EXPIRATION DATE OF THE LICENSE STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

TRAFFIC CONTROL PLAN - SITE 5

EMERGENCY EARTHQUAKE ROCKFALL REPAIRS Various Locations on Hawaii, Unit 1

Federal Aid Project No. ER-15(19)

Date: Dec. 18, 2009 Scale: AS NOTED SHEET No. C-5.2 OF 4 SHEETS



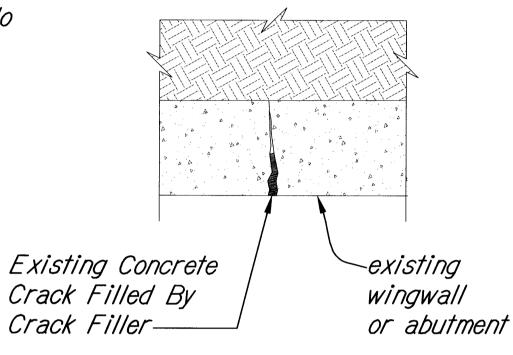
Notes:

1. Surface Preparation:

A. The Cracks And Adjacent Substrate Must Be Clean, Sound And Free Of Frost. Remove Dust, Laitance, Grease, Curing Compounds, Waxes, Impregnations, Foreign Particles, Efflorescence And Other Bond Inhibiting Materials From The Surface By Mechanical Means, I.e. - Sandblasting, High Pressure Waterblasting, Etc., As Approved By The Engineer.

B. With A Mechanical Router Or Hand Chipping Tool Create A 1/2" X 1/2" Minimum Notch With A Roughened Surface Profile Be Sure Area To Be Repaired Is Not Less Than 1/2" In Depth. Substrate Must Be Saturated Surface Dry (SSD) With No Standing Water Prior To Product Application.

- 2. Apply Scrub Coat To Prepared Substrate
- 3. While Scrub Coat Is Still Wet Place Sikatop 123 Plus Or Equivalent Filling The The Entire Cavity
- 4. Strike Off And Level As Required.



Approx. 10'-0" existing cold joint at existing 6" north west wingwall waterline as occur existing girder and slab -Assume 10" Wide 10" Deep Void At The Wall Face For Crack Repair On Bidding Purpose Wingwall And Abutment At South East Wingwall Side Only, existing built up Approx. Length = 7', sidewalk support as occur at south east and south west wing walls Crack Repair On Wingwall, Approx. Length = 36' Typ. (All Four (4) Wing Walls) -existing wingwall existing abutment

Note: Max Existing Crack Width = 1 3/4"

Scale: 1/2" = 1'-0"

CRACK REPAIR DETAIL Scale: 1/2" = 1'-0"

Existing Concrete Spall (Shown Hatched), Approx. Area = 8 Square Feet, Depth = 3', Patched With Polymer Modified Cementitious

Mortar existing girder and slab existing crack

SPALL REPAIR DETAIL Scale: 1/2" = 1'-0"

Notes:

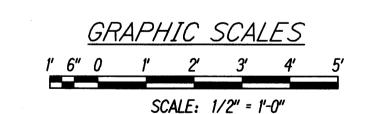
1. Chip Concrete Substrate To Obtain A Surface Profile Of ± 1/16" With A New Fractured Aggregate Surface.

Remove Dirt

Necessary For

Crack Repair-

- 2. Clean Any Exposed Reinforcement By Sandblasting Or With A Wire Brush, Removing All Corrosion, Oil, Dirt, And All Other Bond Inhibiting Agents.
- 3. Substrate Should Be Saturated Surface Dry (SSD) With No Standing Water. Repair Surfaces Shall Be Free Of Bond Inhibiting Materials By Blowing With Compressed Air.
- 4. Apply Corrosion Inhibiting Bonding Agent To All Surfaces To Be Patched, Including Reinforcing Steel.
- 5. Completely Fill Chipped Areas With Polymer Modified Cementitious Mortar. If More Than 1" In Depth, Add A 3/8" Coarse Aggregate. Finish To Existing Lines. Match Exist. Adjacent Surface Finish.
- 6. Maximum Patching Layer Thickness Shall Be Limited To Manufacturer's Specifications. If Repair Depth Deeper Than Permitted Layer Thickness Apply Repair In Multiple Lifts In Accordance With Manufacturer's Specifications.



existing dirt as

occur at north

west and south

west wing walls,

see C-5.1 for topo.

FED. ROAD DIST. NO.

FISCAL SHEET YEAR NO.

2009 44

TOTAL SHEETS

FED. AID PROJ. NO.

ER-15(19)

LICENSED PROFESSIONAL ENGINEER NO. 10304-S

SITE 5 WINGWALL CRACK REPAIR ELEVATION

THIS WORK WAS PREPARED BY ME OR



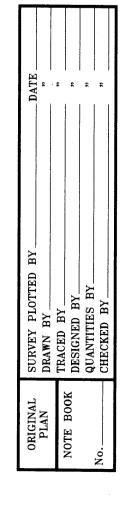
4/30/10 EXPIRATION DATE OF THE LICENSE DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION

WAIKANE BRIDGE REPAIR SECTION AND DETAILS

EMERGENCY EARTHQUAKE ROCKFALL REPAIRS

Various Locations on Hawaii, Unit 1 Federal Aid Project No. ER-15(19) Date: 12/18/09 Scale: AS NOTED

SHEET No. S-5.2 OF 4 SHEETS



44