

FED. ROAD DIST. NO.	STATE	FEDERAL AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1M-0300(123)	2011	35	65

GENERAL

- All materials and workmanship shall conform to the Drawings and Specifications.
- The Structural Drawings and Specifications represent the finished structure. They do not indicate the method of construction. The Contractor shall provide all measures necessary to protect the structure during construction. Such measures shall include, but not be limited to, bracing, shoring for loads due to construction equipment, wind, seismic, etc. Observation visits to the site by the Engineer shall not include inspection of the above items.
- Civil and electrical plans are considered a part of the Structural Design Drawings and are to be used to define detail configuration including, but not limited to, relative location of elevations, locations of all slopes, dimensions, etc.
- The Contractor shall be solely responsible for protection of adjacent property structures, streets and utilities.
- The Contractor shall be solely responsible for coordinating the work of all trades and shall check all dimensions. All discrepancies shall be called to the attention of the Engineer and be resolved before proceeding with the work. Existing framing dimensions shall be verified in field by Contractor.
- Shop drawings required by the Specifications shall be submitted to the Engineer for review prior to fabrication.
- Notes and details on drawings shall take precedence over General Notes unless stricter requirement noted in General Notes.

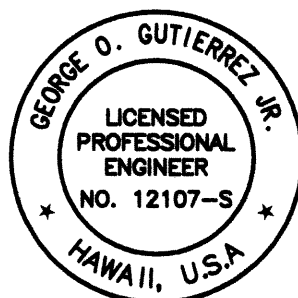
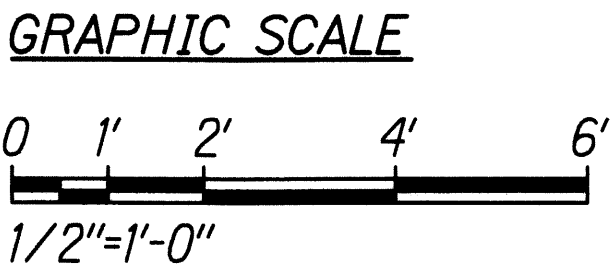
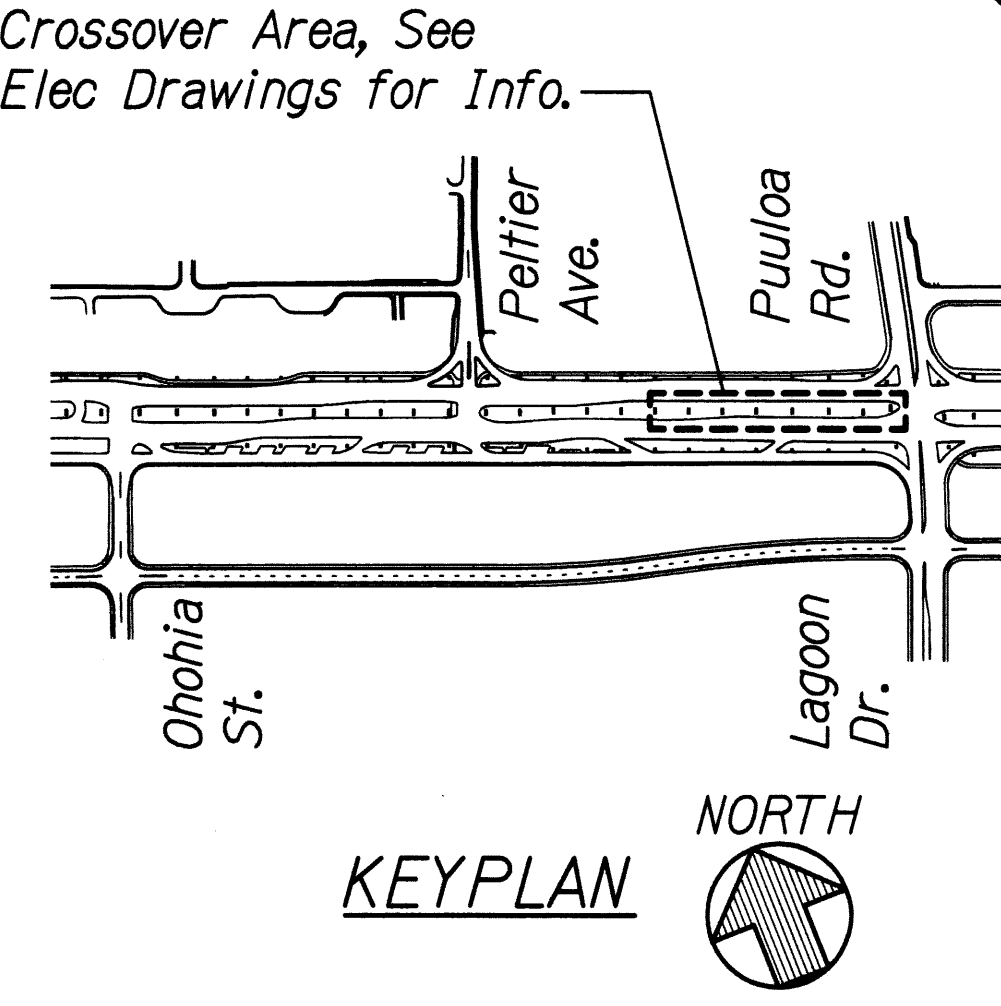
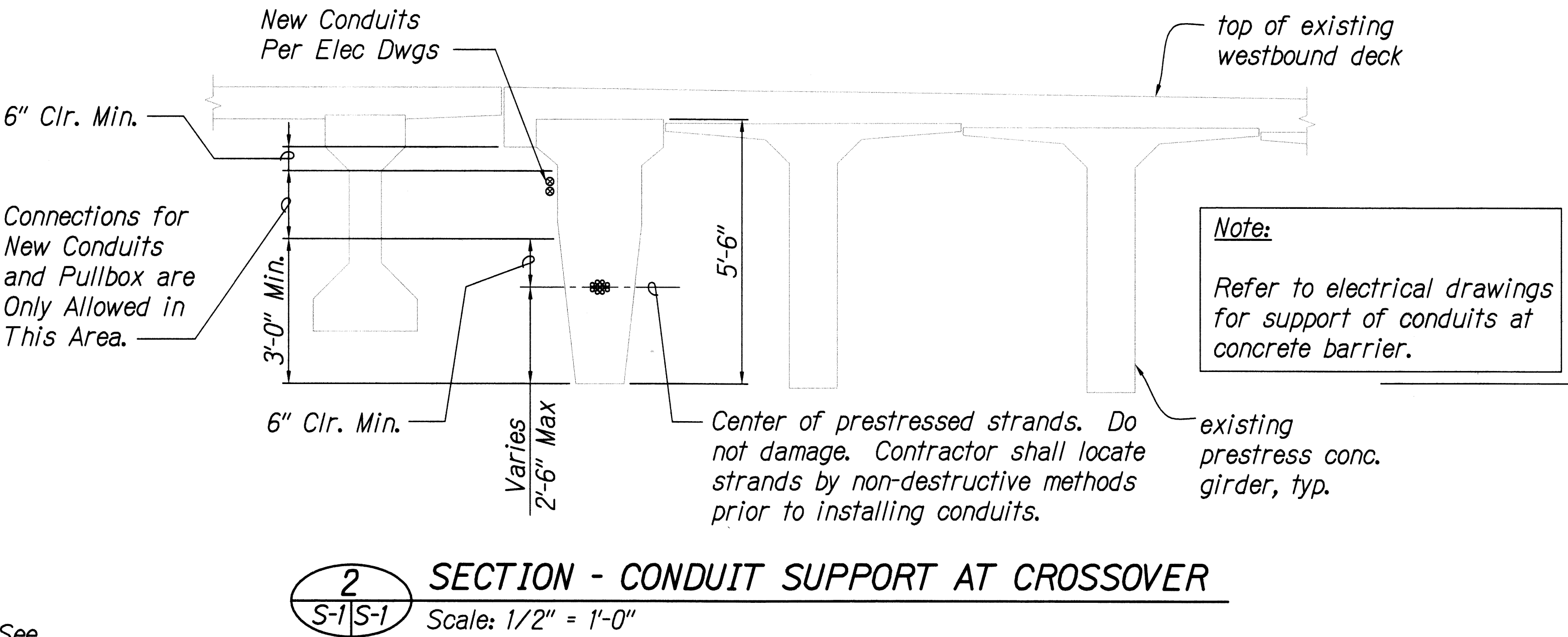
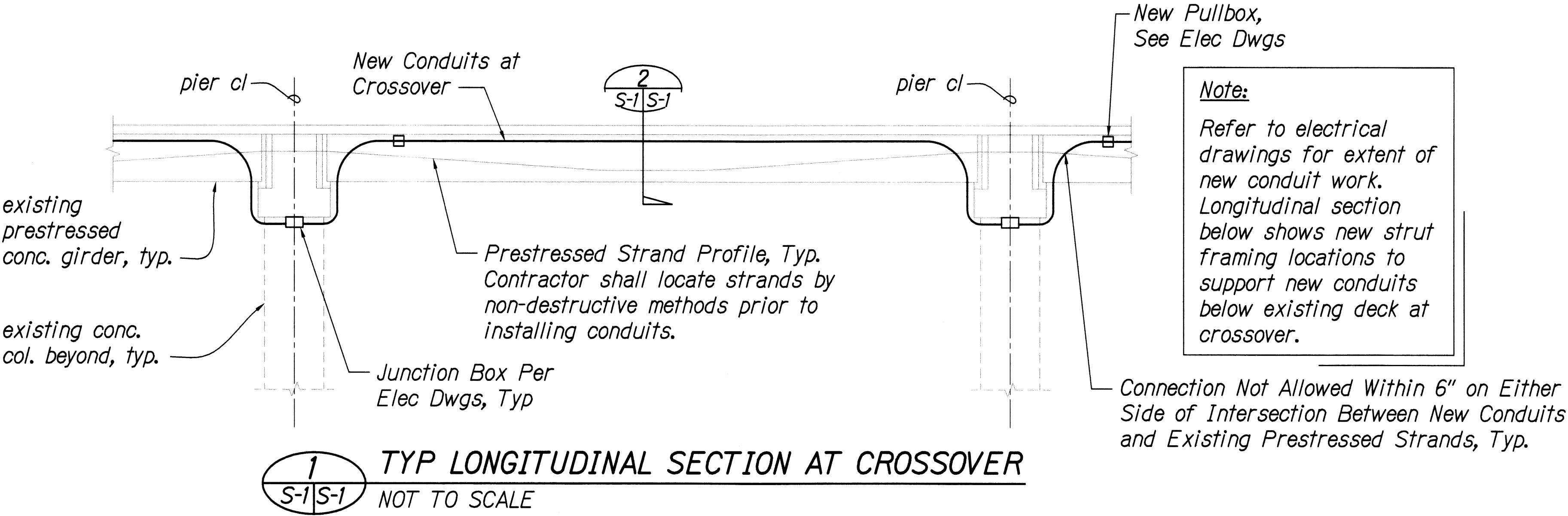
POWDER ACTUATED FASTENERS

- Contractor shall locate prestressed strands by non-destructive testing (NDT) methods prior to installing conduits. Ground penetrating radar and digital meters that use low frequency electromagnetic field to locate ferrous objects within a structure are acceptable NDT methods. Location, size and depth of reinforcing shall be determined.
- Fasteners shall have a minimum diameter of 0.145" diameter and embedded 1" into concrete. Fasteners shall not damage existing rebar and prestressed reinforcing. Minimum shear capacity shall be 200 lbs per fastener and minimum tension capacity shall be 100 lbs per fastener.
- Fasteners shall be stainless steel, complying to AISI 316 requirements.
- Submit product data to engineer for review prior to installation. Installation shall comply with manufacturer recommendations.

ABBREVIATIONS

CL	Centerline
CLR	Clear
COL	Column
CONC	Concrete
ELEC	Electrical
MAX	Maximum
MIN	Minimum
TYP	Typical

A STRUCTURAL GENERAL NOTES



STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**CONDUIT SUPPORT DETAILS**  
Freeway Management System, Phase 1C,  
Part 1A: Communication and  
Power Infrastructure  
Federal Aid Project No. 1M-0300(123)  
Scale: As Shown Date: 3-28-11

SHEET No. S-1 of 1 OF 65 SHEETS

ORIGINAL PLAN	DATE
NOTED BY	
DESIGNED BY	
CHECKED BY	
NO.	

NOT TO SCALE