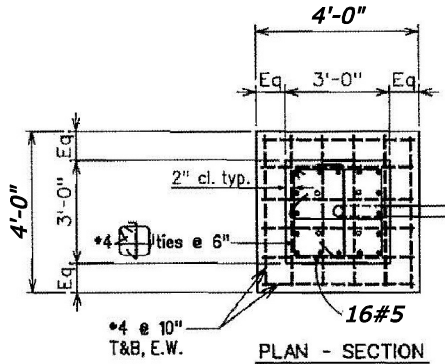
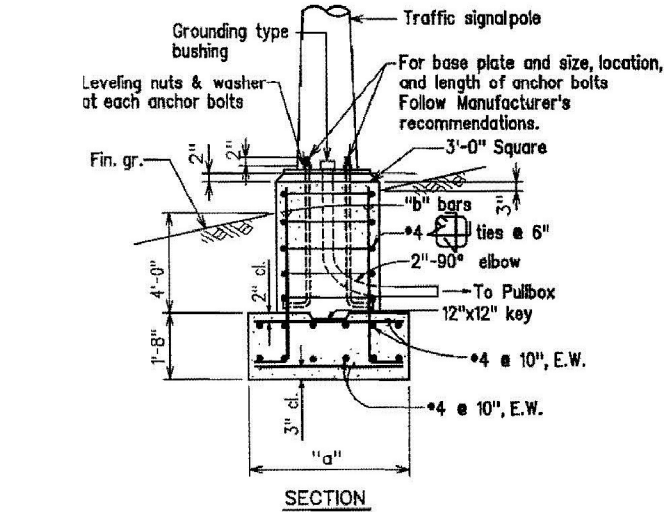


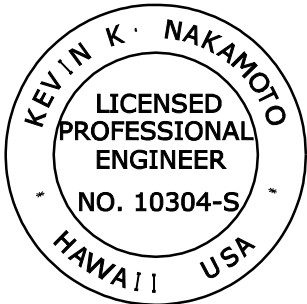
12/10/2014 10:02:20 AM W:_Civil 3D Projects\2014_027.001 ATKINS Saddle Road West Side Truck Escape Ramps\Roadway\Sheets\U-1\HI SR 20000_upl02.dgn

STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(8)	U2	U3

1. Design Specifications:
- (A) Design shall conform w/ the latest AASHTO Standard Specifications for the Structural Supports for Highway Signs, Luminaires & Traffic Signals and its interim supplements and modifications by the Highways Division, Department of Transportation State of Hawaii.
- (B) Latest HDOT Memorandum with subject title "Design Criteria for Bridges and Structures."
2. Loads:
- (A) Basic Wind Speed: 105 mph.
- (B) Recurrence interval of 50 years.
- (C) Fatigue importance factor, IF, shall be based on Fatigue Category I for cantilevered traffic signal structures.
- (D) Vortex shedding induced loads shall be considered for cantilevered mast arms and pole shafts that do not have tapers or have tapers of less than 0.14 in/ft.
3. Materials:
- (A) All concrete strengths shall be as noted below unless otherwise noted:
- | Item No. | Structural Parts | Classes of Concrete | Specified Compressive Strength f'c (28 Days) |
|----------|-----------------------|---------------------|--|
| (1) | Footings and Pedestal | - | 4,500 psi |
- All concrete with a 28 day compressive strength of 4,000 psi or greater shall have a maximum W/C ratio of 0.45.
- (B) All connection bolts shall be AASHTO M164 bolts and anchor bolts shall be AASHTO M314-105 bolt.
- (C) Aluminum members and surfaces in contact with structural steel shall be isolated with neoprene material as approved by the Engineer.
4. General:
- (A) See B-01, TE-32, TE-33A.1, and TE-33A.2 for additional information.
- (B) The recommendations of the traffic pole manufacturer shall be followed. Manufacturer shall select pole, anchor bolts, etc. based on criteria given in the contract documents. The Contractor shall submit catalog cuts and calculations to the Engineer for approval.
- (C) Alternate designs in accordance with the plans and specifications shall use the Service Load Design Method and shall be stamped by a registered engineer of the State of Hawaii in the related discipline and submitted to the Engineer for approval.
- (D) The Contractor shall use templates while installing the anchor bolts. Anchor bolts shall be vertical.
- (E) Excavation and backfill shall be considered incidental to the cost of the traffic signal foundation.
- (F) Foundation is subsidiary to item No. 63602-2000, System Installation, Lighting.



STREET LIGHT FOUNDATION DETAIL



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

4/30/2016

SIGNATURE

EXPIRATION DATE OF THE LICENSE

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

U.S. CUSTOMARY SPECIAL
**SOLAR POWERED
STREET LIGHTING DETAILS**
SHEET 1 of 2

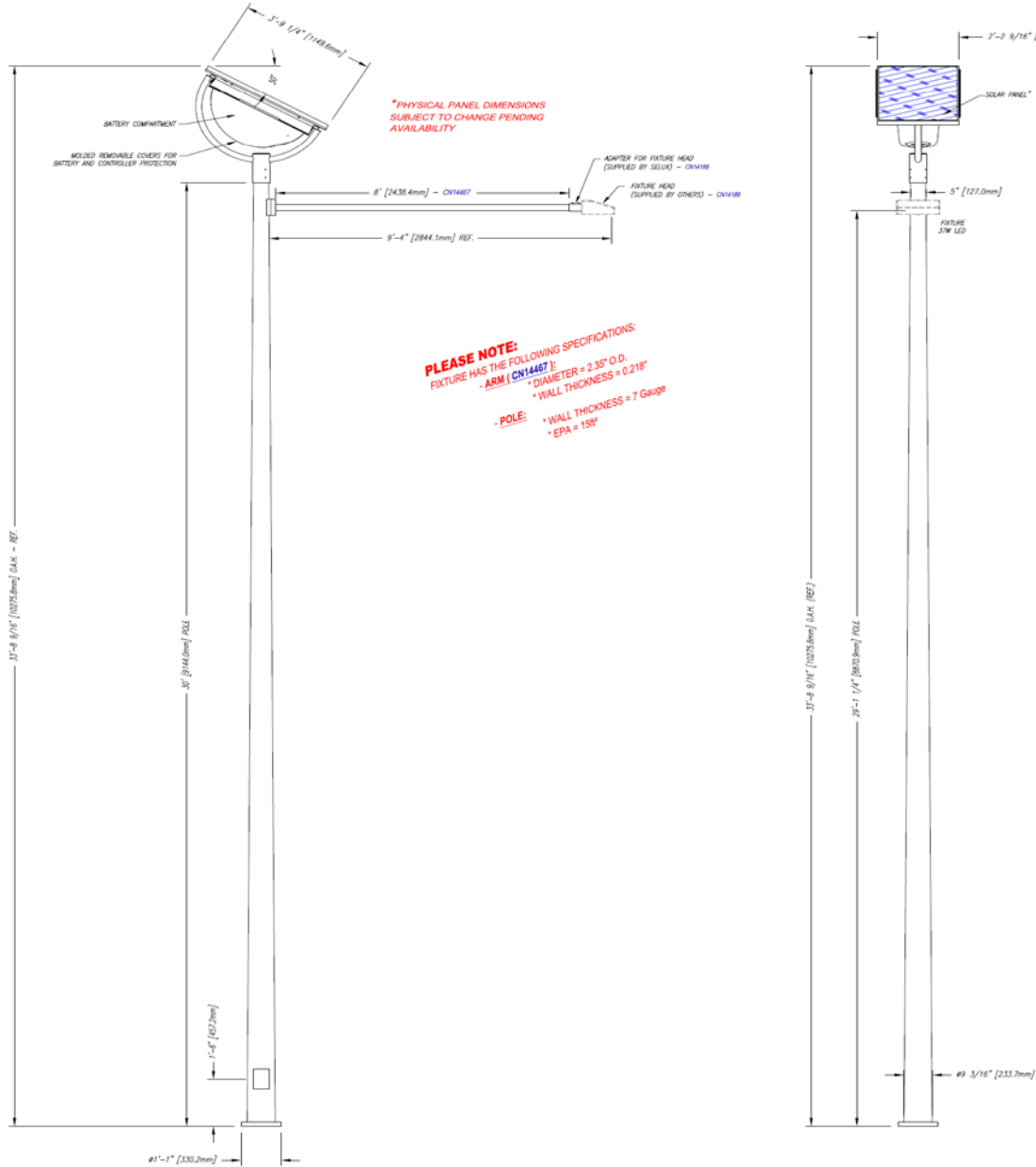
SPECIAL
636-A

STATE	PROJECT	SHEET NO.	TOTAL SHEETS
HI	HI A-AD 6(8)	U3	U3

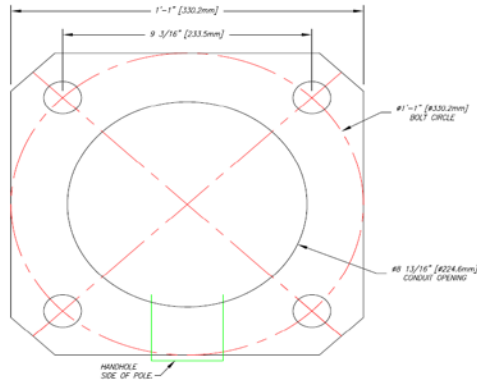
FIXTURE - DSCLS-XX-1-L35-XX-B2-P3-2XXX-PM3-GV-CN14188-CN14467; QTY: (4x)
POLE - ST925-7-30-GV-T5-SM2084A; QTY: (4x)

Refer to Specification sheet for
Construction details and available options.

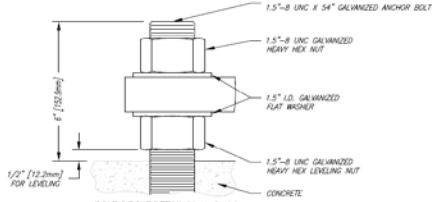
CN14188 - Solar Fixture for luminaire by others
CN14467 - Discera 4 LED solar with 8' arm
SM2084A - Fully galvanized anchor bolts



PLEASE NOTE:
FIXTURE HAS THE FOLLOWING SPECIFICATIONS:
- **ARM (CN14467):**
* DIAMETER = 2.35" O.D.
* WALL THICKNESS = 0.218"
- **POLE:**
* WALL THICKNESS = 7 Gauge
* EPA = 150'



BOLT CIRCLE DETAIL (Not to Scale)
USE CAUTION WHEN SETTING ANCHOR BOLTS. BOLTS MUST BE VERTICALLY STRAIGHT AND CENTERED ON DIMENSIONS SHOWN.



BOLT CIRCLE DETAIL (Not to Scale)
BASE = 15" SQUARE
POLE = #6 2.06" to #5" TAPER
BOLT CIRCLE = #1 1/8"
CONDUIT HOLE = #8 1 1/8"
FOR STANDARD ANCHOR BOLT #1 1/2" x 54"
ANCHOR BOLT PROJECTION = 6"

- 1. Corrected AASHTO note.
- 1. Added additional notes per customer request.
- 1. Revised order from Pre-Order to Approvals.
- 2. Revised qty. from (22x) to (4x).
- 1. Created the DWG.

MATERIAL SPECIFICATIONS	
Sheet	Steel (GALVANIZED)
Base Plate and Flanges	Steel (GALVANIZED)
Anchor bolts	ASTM F1554 Grade 55 (GALVANIZED)
FINISH COATING	
Pole Luminaire	GALVANIZED
Hardware (Anchor Bolts)	Hot dip Galvanized per ASTM-A153 Steel
DESIGN CRITERIA	
Structure & Hardware	Pole Certified to a Wind Velocity of 110 mph per AASHTO 2009. Values are nominally designed for 3-second gust wind speed in MPH. Please verify with your local official for compliance.
IN A CONTINUING EFFORT TO OFFER THE BEST PRODUCT POSSIBLE SELUX RESERVES THE RIGHT TO CHANGE, WITH OUT NOTICE, SPECIFICATIONS OF MATERIALS THAT, IN OUR OPINION WILL NOT ALTER THE FUNCTION OF THE PRODUCT.	

PLEASE NOTE:
CONCRETE FOOTING AND FEED CONDUIT TO BE DESIGNED BY OTHERS FOR SPECIFIED WIND LOADING (BY OTHERS).
ADEQUATE DRAINAGE MUST BE PROVIDED IN CONCRETE FOUNDATION OF GROUT (BY OTHERS).

REVISIONS

- Rev D; PAS; 07/16/15; Revised Per Manufactures Request.
- Rev C; EJS; 06/10/15; Revised for Resubmission Per Customers Request.
- Rev B; EJS; 04/22/15; Revised for Resubmission Per Customers Request.
- Rev A; EJS; 11/25/14; Created the DWG.

For Material & Construction Details Refer to SELUX Specification Sheets, www.selux.com, or Contact SELUX at 1-800-SELUX-CS

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!!! ATTENTION !!!

RELEASE OF THIS ORDER MUST BE ACCOMPANIED WITH APPROVED DRAWING BEARING THE FOLLOWING APPROVAL STAMPS

**SPECIFYING ARCHITECT
SPECIFYING ENGINEER
INSTALLING CONTRACTOR**

Drawing Size: 22" X 34"

selux		5 Lumen Lane P.O. Box 1060 Highland, NY 12528 Phone: (845) 691-7723	
JOB NAME: Saddle Road Intersection			
JOB LOCATION: Hawaii, HI			
SOLD TO: CED		DATE: 11/25/14	
CUST. P.O.: 31398K926327S		DRAWN BY: EJS	
selux Order# 44466		REV: Rev D	
		Drawing # 44466-1D	
		PAGE 1 of 1	

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
CENTRAL FEDERAL LANDS HIGHWAY DIVISION

U.S. CUSTOMARY SPECIAL
**SOLAR POWERED
STREET LIGHTING DETAILS**
SHEET 2 of 2

SPECIAL
636-B

As Built S.T. Rhoades Construction, Inc.