DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	10	50.2/53.4	141	945

Timothy Tieu 3-11-08
REGISTERED CIVIL ENGINEER DATE

3-17-08
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER TIM TIEU No. C56970 Exp. 6-30-09 CIVIL STATE OF CALIFORNIA

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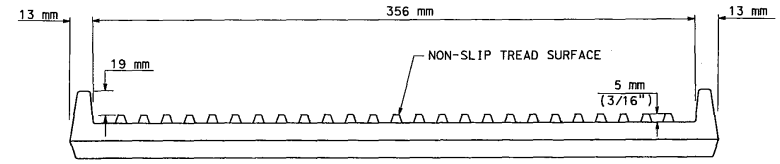
To get to the Caltrans web site, go to: http://www.dot.ca.gov

Caltrans Metric



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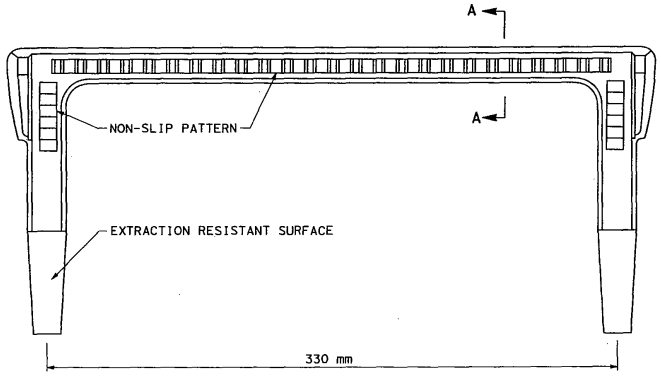

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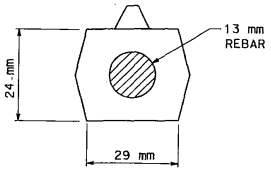
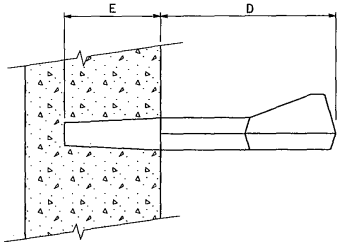


SECTION A-A



SIDE ELEVATION

~~AMERICAN PUBLIC WORKS ASSOCIATION-SOUTHERN CALIFORNIA CHAPTER~~

~~PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. GREENBOOK COMMITTEE 1991 REV. 1996~~	POLYPROPYLENE PLASTIC STEP	~~STANDARD PLAN METRIC 636-1 SHEET 1 OF 2~~

NOTES:

1. STEPS SHALL BE STEEL-REINFORCED COPOLYMER POLYPROPYLENE PLASTIC CONFORMING TO:
   (A) ASTM D478 AND C497, EXCEPT THAT THE MINIMUM HORIZONTAL PULLOUT LOAD SHALL BE 6.7 kN.
   (B) ASTM A615 GRADE 60 DEFORMED REINFORCING STEEL BAR.
   (C) CALIFORNIA CODE OF REGULATIONS TITLE 8, GENERAL INDUSTRY SAFETY ORDERS.
2. STEPS SHALL BE CAPABLE OF WITHSTANDING AN IMPACT LOAD OF 95 N.m AT -7°C WITHOUT CRACKING OR FRACTURING.
3. THE MINIMUM TOTAL CROSS-SECTIONAL AREA OF THE EXPOSED PORTION OF THE STEP, INCLUDING THE DEFORMED STEEL BAR AND EXCLUDING THE NON-SLIP TREAD SURFACE, SHALL BE 645 mm2.
4. THE ENTIRE POLYPROPYLENE PLASTIC MATERIAL SURROUNDING THE REINFORCING STEEL BAR SHALL BE CAST MONOLITHICALLY. MINIMUM COVER SHALL BE 5 mm.
5. A CERTIFICATION OF COMPLIANCE WITH THE REQUIREMENTS OF NOTES 1 THROUGH 4 PREPARED BY AN INDEPENDENT CERTIFIED LABORATORY SHALL BE SUBMITTED TO THE ENGINEER CONCURRENTLY WITH A REQUEST FOR APPROVAL.
6. E=86 mm. FOR VAULTS AND MANHOLES, D=140 mm. FOR OTHER INSTALLATIONS D=190 mm. THESE DIMENSIONS MAY BE PLUS OR MINUS 6 mm.
7. STEP SHALL BE EVENLY SPACED. MAXIMUM VERTICAL SPACING OF STEPS SHALL BE 400 mm WITH THE BOTTOM STEP A MAXIMUM OF 600 mm ABOVE FLOR OR SHELF.
8. IF TAPERED STEPS ARE INSTALLED INTO STRAIGHT DRILLED OR FORMED HOLES, APPROVED NON-SHRINK GROUT SHALL BE INJECTED INTO THE HOLE PRIOR TO INSTALLATION. HOLES SHALL BE STRAIGHT AND PARALLEL. EXCEPT AS OTHERWISE NOTED, STEPS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED PROCEDURES.
9. A DROP STEP WITH A MINIMUM DROP OF 19 mm MAY BE USED. THE DROP STEP SHALL MEET ALL OTHER CRITERIA OF THIS PLAN.

~~AMERICAN PUBLIC WORKS ASSOCIATION-SOUTHERN CALIFORNIA CHAPTER~~

POLYPROPYLENE PLASTIC STEP	~~STANDARD PLAN METRIC 636-1 SHEET 2 OF 2~~

2 REVISED PER ADDENDUM No. 2 DATED FEBRUARY 18, 2009

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

DRAINAGE DETAIL

DD-13

DATE	REVISED BY	DATE REVISED

CALCULATED/DESIGNED BY | CHECKED BY

PROJECT ENGINEER: TIMOTHY TIEU

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans HYDRAULICS

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ASST REVISION 00-00-00 | DATE PLOTTED => 11-FEB-2009 TIME PLOTTED => 13:27

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => s135318
DGN FILE => 7117071c13.dgn

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