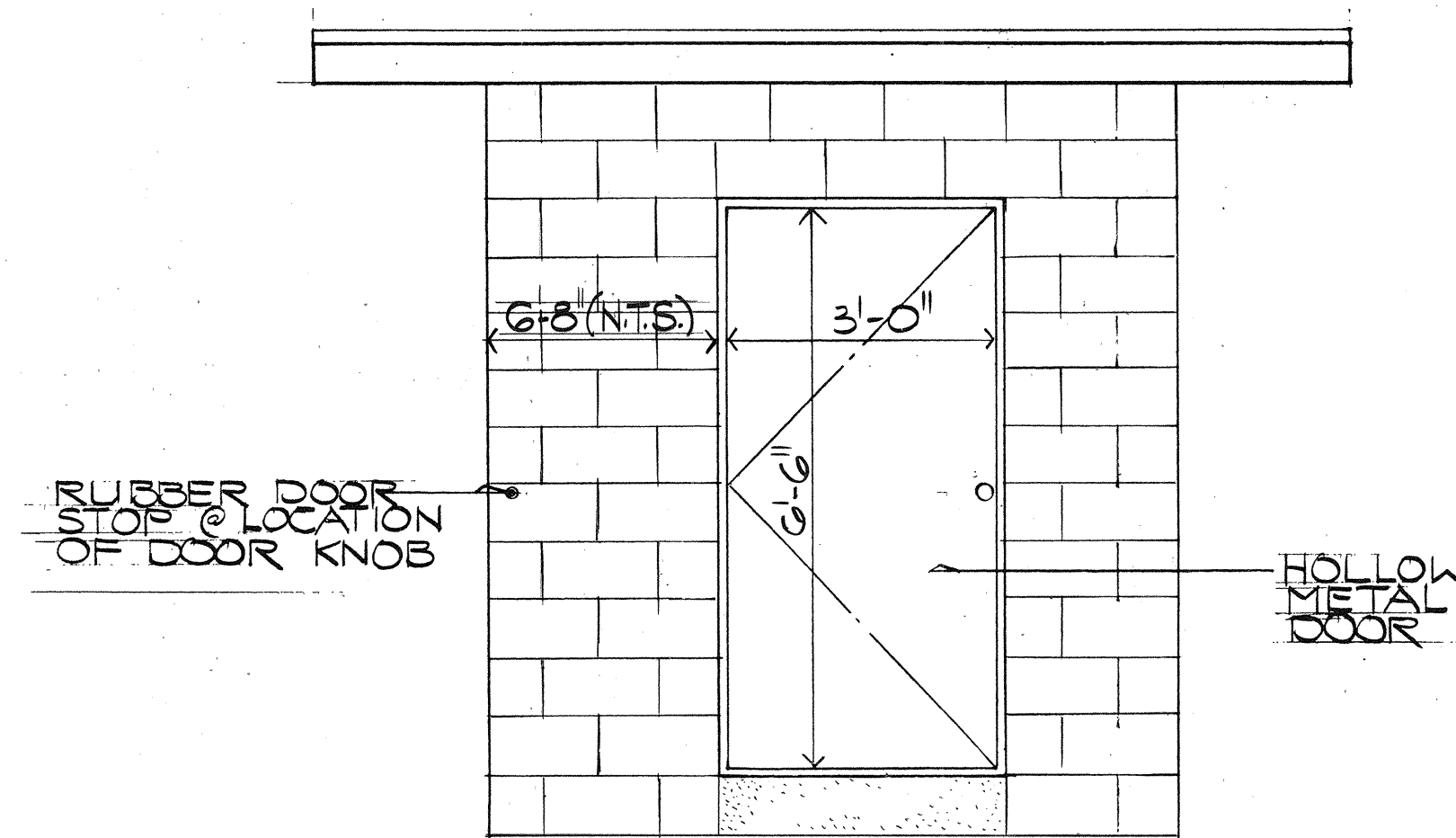
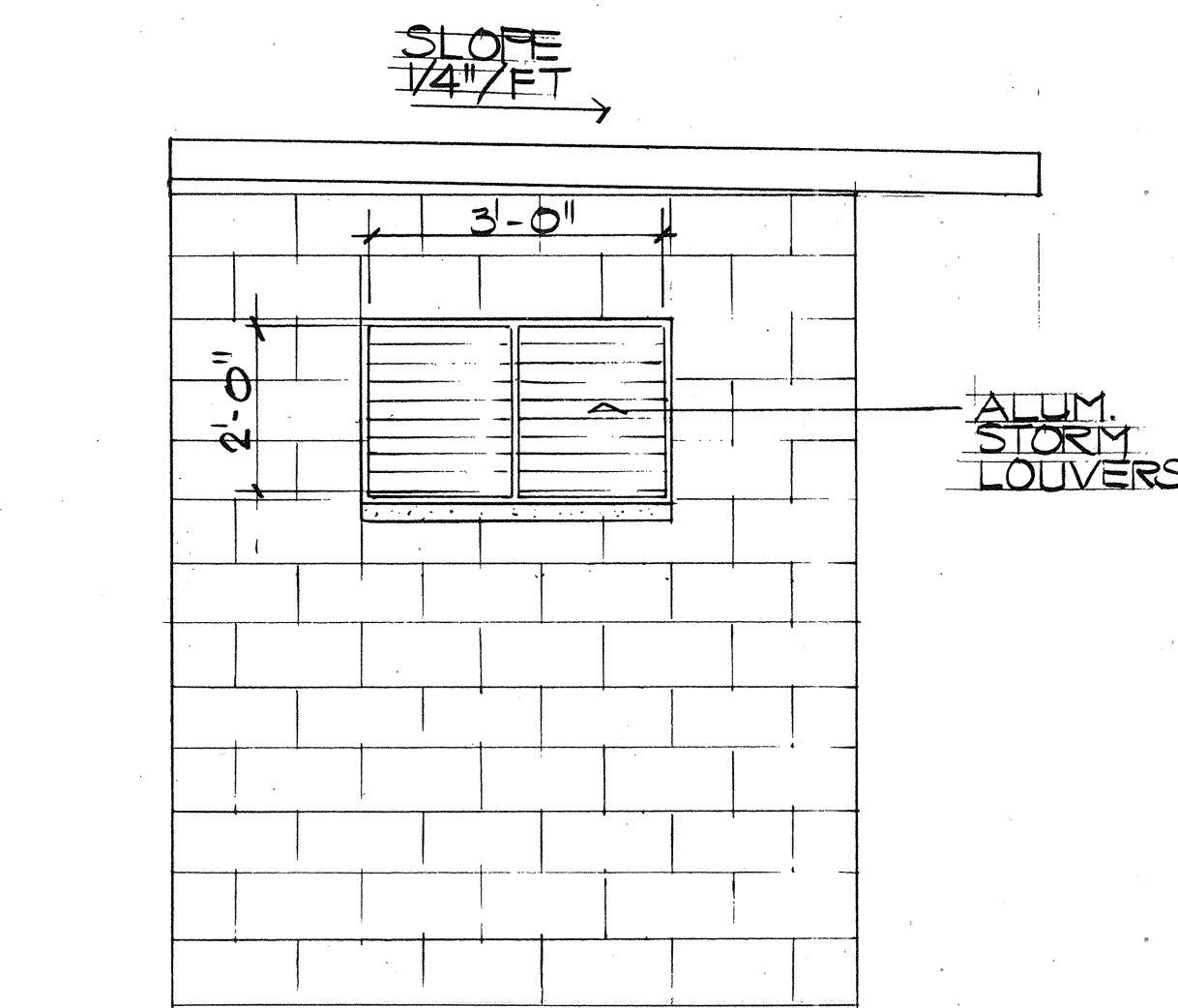


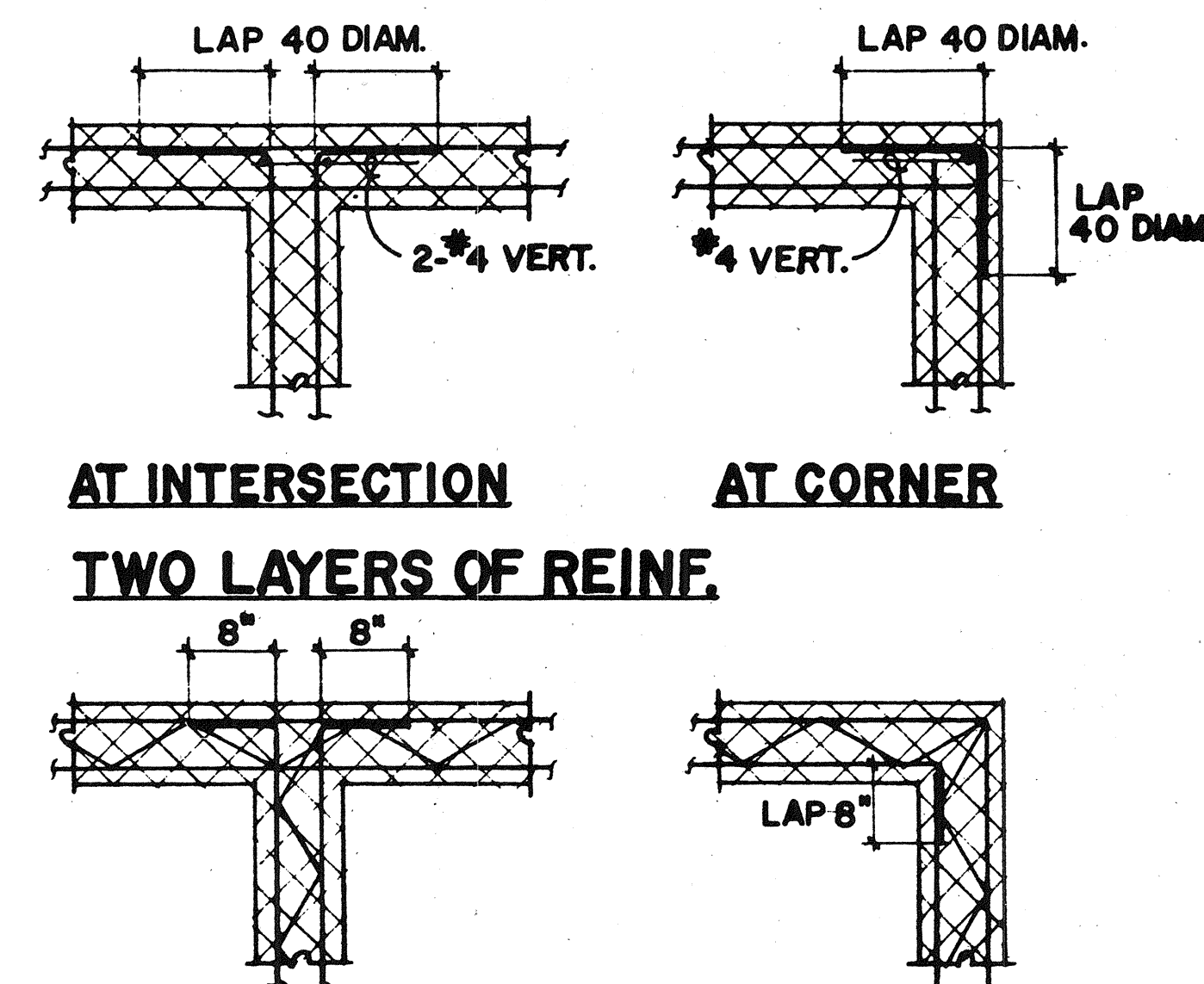
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61D-01-85	1988	28	29



EAST ELEVATION
(WEST-SIMILAR BUT W/OUT DOOR)
SCALE: 1/2" = 1'-0"



SOUTH ELEVATION
(NORTH SIMILAR - BUT OPPOSITE)
SCALE: 1/2" = 1'-0"



TYP. CMU WALL HORIZ. REINF. DET.
NO SCALE
NOTE: PROVIDE HORIZONTAL REINFORCING AT 16" O.C. IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY ALL FIELD DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. ALL DISCREPANCIES SHALL BE PROMPTLY REPORTED TO THE CONSTRUCTION ENGINEER.
2. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION ENGINEER BEFORE PROCEEDING WITH ANY WORK SO INVOLVED.
3. ALL WORK SHALL CONFORM TO THE UNIFORM BUILDING CODE, LATEST EDITION, AS ADOPTED BY THE CITY AND COUNTY OF HONOLULU.
4. UNLESS SPECIFICALLY DETAILED ELSEWHERE, CONTRACTOR SHALL FOLLOW TYPICAL DETAILS ON THIS SHEET.

REINFORCING STEEL

1. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 40.
2. LOW HYDROGEN WELDING RODS SHALL BE USED FOR ALL WELDING TO REINFORCING BARS.
3. REINFORCING SHALL BE SPLICED ONLY AS NOTED IN DRAWINGS. ALL OTHER SPLICES SHALL BE APPROVED BY THE CONSTRUCTION ENGINEER.
4. BARS NOTED "CONT." SHALL HAVE A MINIMUM SPLICE LENGTH OF 30 BAR DIAMETERS BUT NEVER LESS THAN 2'-0".
5. PROVIDE DOWELS IN FOOTINGS AND/OR GRADE BEAMS THE SAME SIZE AND SPACING AS COLUMN AND WALL REINFORCING. UNLESS NOTED OTHERWISE PROVIDE A MINIMUM PROJECTION OF 30 BAR DIAMETERS BUT NOT LESS THAN 2'-0".
6. MINIMUM CONCRETE COVER FOR REINFORCING BARS SHALL BE:

CONCRETE CAST AGAINST EARTH	3"
EXPOSED TO EARTH OR WEATHER	1-1/2"
FORMED SURFACE BELOW GRADE	2"
SLAB-ON-GRADE TOP BARS	1"

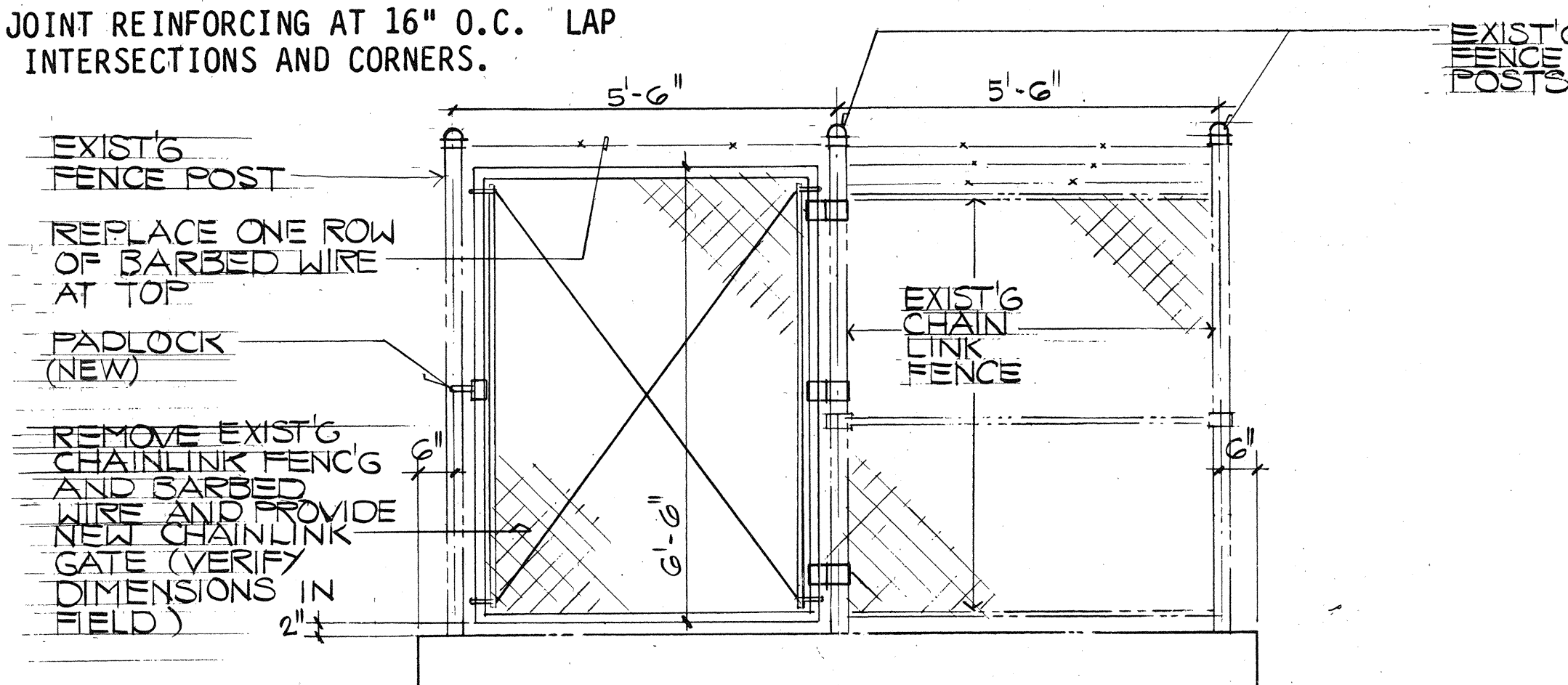
CONCRETE

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 318-83.
2. THE MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF CONCRETE AT 28-DAYS SHALL BE:

ALL CONCRETE	3,000 PSI
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3. LOCATIONS OF ALL CONSTRUCTION OR COLD JOINTS MUST BE APPROVED BY THE CONSTRUCTION ENGINEER.
4. PIPES OR DUCTS EXCEEDING ONE THIRD THE SLAB OR WALL THICKNESS SHALL NOT BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED. PIPES MAY PASS THROUGH STRUCTURAL CONCRETE IN SLEEVES BUT SHALL NOT BE EMBEDDED THEREIN.
5. SECURE ALL ANCHORS, BOLTS, INSERTS, ETC. PRIOR TO POURING CONCRETE. VERIFY ALL SLOTS, GROOVES, FINISHES, ETC. PRIOR TO POURING CONCRETE.
6. 48 HOURS PRIOR TO POURING OF ANY STRUCTURAL CONCRETE THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION ENGINEER SO AN INSPECTION CAN BE MADE OF ALL FORMS AND REINFORCING.

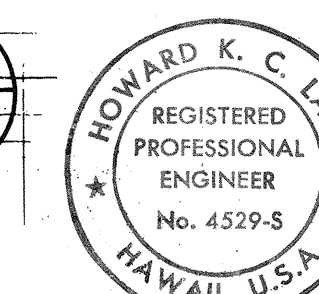
CONCRETE BLOCK MASONRY

1. CONCRETE BLOCK SHALL BE GRADE "N", TYPE II HOLLOW LOAD BEARING UNITS CONFORMING TO ASTM C90.
2. MASONRY MORTAR SHALL BE TYPE "M", WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,500 PSI CONFORMING TO UBC STANDARD 24-20.
3. MASONRY GROUT SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 2,000 PSI.
4. ALL CELLS CONTAINING REINFORCING, ANCHORS AND INSERTS SHALL BE GROUTED SOLID. GROUT IN LIFTS NOT TO EXCEED 8'-0".
5. UNLESS NOTED OTHERWISE ALL WALLS SHALL BE CONSTRUCTED IN CONVENTIONAL RUNNING BOND.
6. AT ALL CMU WALLS PROVIDE HORIZONTAL JOINT REINFORCING AT 16" O.C. LAP REINFORCING 8 INCHES AT ALL SPLICES, INTERSECTIONS AND CORNERS.



NEW CHAIN LINK GATE EAST ELEVATION
DETAIL
SCALE: 1/2" = 1'-0"

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THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
H. Lau

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

ELEVATIONS, NOTES, AND DETAILS

PALI HIGHWAY TUNNELS
HIGHWAY LIGHTING IMPROVEMENTS
PROJECT NO. 61D-01-85

SCALE: 1/2" = 1'-0" DATE: JUL., 1987

SHEET No S-2 OF 29 SHEETS