

ORIGINAL PLAN  
DATE 11/25/88  
DRAWN BY M. SOPER  
DESIGNED BY R. MATRISIAN  
CHECKED BY J. LOUE  
NOTE BOOK  
No.

ABBREVIATIONS

|        |                    |        |                              |
|--------|--------------------|--------|------------------------------|
| AA     | SOUND ATTENUATOR   | LBS    | POUNDS                       |
| ABBREV | ABBREVIATIONS      | MAX    | MAXIMUM                      |
| AD     | ACCESS DOOR        | MANUF  | MANUFACTURER                 |
| AFF    | ABOVE FINISH FLOOR | MCC    | MOTOR CONTROL CENTER         |
| AP     | ACCESS PANEL       | MECH   | MECHANICAL                   |
| ARCH   | ARCHITECTURAL      | MIN    | MINIMUM                      |
| ATMOS  | ATMOSPHERE         | MTB    | MOTOR TERMINAL BOX           |
| BL     | BASE LINE          | NC     | NORMALLY CLOSED              |
| CL     | CENTERLINE         | NIC    | NOT IN CONTRACT              |
| CD     | CONTROL DAMPER     | NO     | NORMALLY OPEN                |
| CONT   | CONTINUATION       | NTS    | NOT TO SCALE                 |
| DBA    | DECIBEL (A-SCALE)  | OA     | OUTSIDE AIR                  |
| DEFL   | DEFLECTION         | OB     | OUTBOUND                     |
| DIA    | DIAMETER           | OC     | ON CENTER                    |
| DIM    | DIMENSION          | PCC    | POINT OF COMPOUND CURVATURE  |
| DN     | DOWN               | PD     | PRESSURE DROP                |
| DWG    | DRAWING            | PL     | PLATE                        |
| EA     | EXHAUST AIR        | POC    | POINT OF CONNECTION          |
| ELEC   | ELECTRICAL         | PSF    | PONDS PER SQUARE FOOT        |
| EQUIP  | EQUIPMENT          | PSI    | POUNDS PER SQUARE INCH       |
| EXH    | EXHAUST            | REQD   | REQUIRED                     |
| F      | DEGREES FAHRENHEIT | RPM    | REVOLUTIONS PER MINUTE       |
| FP     | FAN PANEL          | SA     | SUPPLY AIR                   |
| FT     | FEET               | ACFM   | ACTUAL CUBIC FEET PER MINUTE |
| GA     | GAUGE              | SF     | SQUARE FEET                  |
| GALV   | GALVANIZED         | SP     | STATIC PRESSURE              |
| GCL=BL | GRADE CONTROL LINE | SS     | STAINLESS STEEL              |
| HP     | HORSE POWER        | STRUCT | STRUCTURAL                   |
| HZ     | HERTZ              | TEMP   | TEMPERATURE                  |
| IB     | INBOUND            | TF     | TUNNEL FAN                   |
| IE     | INVERT ELEVATION   | TP     | TOTAL PRESSURE               |
| IN     | INCHES             | TYP    | TYPICAL                      |
| KW     | KILOWATT           | W/     | WITH                         |
|        |                    | WG     | WATER GAUGE                  |
|        |                    | &      | AND                          |

SYMBOLS

DUCTWORK

|  |   |
|--|---|
|  | DUCT SIZE, FIRST FIGURE IS SIDE SHOWN                 |
|  | FLEXIBLE CONNECTION                                   |
|  | RECTANGULAR-ROUND TRANSITION IN DIRECTION OF AIR FLOW |
|  | AIRFLOW DIRECTION                                     |

EQUIPMENT

|  |   |
|--|---|
|  | EQUIPMENT IDENTIFICATION TAG<br>XX - EQUIPMENT ABBREVIATION<br>5 - EQUIPMENT NUMBER |
|  | AUXILIARY COOLING FAN   |
|  | FAN-MOTOR UNIT  |
|  | CONTROL DAMPER  |
|  | SOUND ATTENUATOR  |

SECTION AND DETAIL DESIGNATION

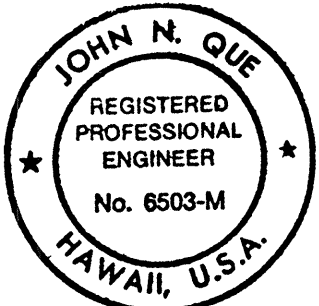
|         |  |   |
|---------|--|---|
| SECTION |  | A - SECTION DESIGNATION (LETTER)<br>10 - SHEET NO. ON WHICH SECTION IS IDENTIFIED<br>15 - SHEET NO. ON WHICH SECTION IS DRAWN |
| DETAIL  |  | 2 - DETAIL DESIGNATION (NUMBER)<br>10 - SHEET NO. ON WHICH DETAIL IS IDENTIFIED<br>15 - SHEET NO. ON WHICH DETAIL IS DRAWN    |

GENERAL NOTES

1. THE CONTRACTOR SHALL VERIFY AND CHECK ALL DIMENSIONS AND DETAILS SHOWN ON THE PLANS PRIOR TO THE START OF INSTALLATION. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE DIRECTOR FOR CLARIFICATION.
2. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE DIRECTOR OF ANY DISCREPANCY OR CONFLICT FOUND IN THE FIELD PRIOR TO OR DURING THE COURSE OF INSTALLATION.

PAY ITEM QUANTITIES

| ITEM NO. | ITEM DESCRIPTION  | QUANTITY/UNIT |
|----------|---|---------------|
| 1.       | EXHAUST FAN-MOTOR UNIT WITH MONITORING DEVICES AND AUXILIARY COOLING FAN AND MOTOR      | 16 EACH       |
| 2.       | SUPPLY FAN-MOTOR UNIT WITH MONITORING DEVICES   | 16 EACH       |
| 3.       | DAMPER WITH ACTUATOR AND MOTOR  | 32 EACH       |
| 4.       | SOUND ATTENUATOR  | 64 EACH       |
| 5.       | INTAKE AND DISCHARGE CONNECTIONS, FLEXIBLE CONNECTIONS, ACCESS DOORS AND STEEL DUCTWORK | LUMP SUM      |
| 6.       | BULKHEAD DAMPER WITH ACTUATOR AND MOTOR   | 4 EACH        |
| 7.       | ANCHOR BOLTS AND FASTENERS (FURNISH AND DELIVER ONLY)                                   | LUMP SUM      |
| 8.       | FIELD PAINTING  | LUMP SUM      |



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

*John H. Que*

DATE REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

GENERAL NOTES, ABBREV,  
SYMBOLS & QUANTITIES

F & I VENTILATION FANS

INTERSTATE ROUTE H-3

F.A.I. PROJ. NO. I-H3-1(60)

SCALE: NONE

DATE: NOV 1989

SHEET NO. 4 OF 24 SHEETS