

SCMC, INCORPORATED

1665 West Drive
San Marino, CA 91108
Phone: (626) 299-7000
Fax: (626) 299-7010



1623 El Verano Drive
Thousand Oaks, CA 91362
Phone: (805) 495-1141

CHANGE ORDER REQUEST

PROJECT NAME: Barth Athletics Complex
HMS Phase IIIA

SCMC C.O.R. #: 6
DATE: 5/8/2019

CONTRACTOR: Shenk Developers
210 N. Central Ave. #225
Glendale CA 91203

BID DIVISION #: 3 HVAC
REF. DOC.: HVAC 03R

ITEM DESCRIPTION OF WORK:

Furnish and install 45 elbow fittings to support vertical duct risers for HVAC units serving main gym.
Per RFI # 06 response

TOTAL AMOUNT REQUESTED: \$18,851.00

OF DAYS REQUESTED: none

REASON:

Bid Set of plans and specifications did not detail supports and elbows at these locations.
Response given via RFI HVAC #06

[Signature]
PROGRAM MANAGER

5/8/19
DATE

[Signature]
ARCHITECT

5.8.19
DATE

[Signature]
OWNER

5/8/19
DATE

1/11

SCHOOL NAME	HUNTINGTON MIDDLE SCHOOL Phase III	Change Order Proposal
PROJECT NAME	CONSTRUCTION OF BARTH ATHLETIC COMPLEX	
DISTRICT NAME	SAN MARINO UNIFIED SCHOOL DISTRICT	COP#: 03R

Bid # F01 - 17/18 - BID DIVISION #3 : HVAC Architect: LPA Project Manager: GERALD SCHUBER Contractor: SHENK DEVELOPERS	Date: 3/27/2019 RFI #: 06 CCD #:
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REVISED

DESCRIPTION: SUPPLY & INSTALL 45 ELBOW FITTINGS TO BRING AC-4A; 4B VERTICAL SUPPLY DUCT RISERS AS PER RFI # 06

(Contractor to provide detailed narrative of Change Order Request work, attach additional pages as required)

Subcontractor Costs (used when work is subcontracted)

Company	Description	Material	Labor	Totals
LIBERTY CLIMATE CONTROL INC.				
PLEASE FIND ATTACHED OUR HVAC SUB-CONTRACTOR'S DETAILED COST BREAKDOWN				\$17,601.-

Subtotals	\$17,601.-
Subcontractor OH and Profit (see GC's for %'s)	INCLUDED
Subcontractor Subtotal	\$17,601.-
Contractor OH and Profit (see GC's for 5%'s)	\$ 880.-
Subcontractor Total + Contractor Mark-up (Line 1)	\$18,481.-

Contractor Costs (used when work is self-performed)

Contractor	Description	Material	Labor	Totals

Subtotals	\$18,481.-
Contractor OH and Profit (15%)	
Contractor Total + Contractor Mark-up (Line 2)	\$18,481.-
Bonding 2% (Line 3)	370.-
TOTAL COSTS FOR COP: <small>(Line 1 + Line 2 + Line 3)</small>	ADD \$18,851.-

TOTAL TIME FOR COP: /

CONTRACTOR: SHENK DEVELOPERS

Submitted by:

Date: 3/27/2019

HVA c COP * 0312

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**Change Order**

Order#: 3

Order Date: 08/29/2018

To: SHENK DEVELOPERS
210 NORTH CENTRAL AVE #225
GLENDALE CA 91203

Project: 1819
SAN MARINO USD-HUNTINGTON MS
1700 HUNTINGTON DR
SAN MARINO CA 91108

The contractor agrees to perform and the owner agrees to pay for the following changes to this contract.

Plans Attached ☐

Ordered By: 2 CHRISTOPHER GUNTHER

Customer Order:

Specifications Attached ☐

Description of Work	Amount
Material	6,633.95
Labor	10,967.03

Notes

Per RFI No.: 06 response contractor should furnish and install 45 elbow fittings to bring AC-4A, 4B vertical supply duct risers close to wall and support with ductwork wall support detail 17 figure B

Design Review Comments:

1a. Review Comment: In general they should detail a credit for the original work and deduct that from the cost of the change.

1b. Response: Cost is for additional duct elbow fittings and wall supports to secure duct in place. This is in addition to the original work required. No known credit.

2a. Review Comment: Labor appears to be high for the amount of ductwork we are adjusting.

2b. Response: Labor hours are accurate for work required. However, in good faith and compromise we are reducing field labor hours from 43-hrs. to 32-hrs. In addition, we have reduced shop labor hours from 60-hrs. to 52-hrs.

3a. Review Comment: 3600 lump sum for general parts we should request a breakdown for this.

3b. Response: Cost breakdown of \$3,600 lump sum material was previously provided. Refer to 'Estimate File Pricing' sheet attached.

Negative changes will lower the overall contract price requiring no additional payment by owner.

Requested Amount of Change**17,600.98**

The original Contract Sum was	467,000.00
Net change by previous Change Orders	0.00
The Contract Sum prior to this Change Order	467,000.00
The Contract Sum will be changed by this Change Order	17,600.98
The new Contract Sum including this Change Order will be	484,600.98
The Contract Time will be changed by	0 Days

Owner: _____ Date: _____

Contractor: _____ Date: _____

HVAC COP#03R

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Change Order

Order: 3

Continued...

Date: 03/27/2019

Description of Work

Amount

4a. Review Comment: There is a line item for vanes and vane rail we already show this on the drawings it should be omitted along with the associated shop labor.

4b. Response: Air foil vane and vane rail are installed in new 45 elbow fittings not shown on original drawings. See detail 1/A3.11 which shows new ducts rising up vertically away from wall. New 45 deg. elbow fittings were provided to bring ducts close to wall to be secured in place with exterior wall support. Refer to RFI 6 and associated sketch SK-01-08-09-2018-1819.

5a. Review Comment: The wall support detail is based on SMACNA standards which are referenced on our drawings and industry standard there should be no cost associated to this clarification.

5b. Response: Contractor must follow DSA approved details at time for bid not SMACNA standards. There was no detail provided for support of new supply ductwork rising up vertically along CMU wall before penetrating wall into gymnasium at C/L C. Contractor should be compensated for additional work not shown on plans at time for bid.



7447 North Chico Avenue
 Suite 111, Ontario, CA 91731
 (909) 395-3133

LCC Bid Item Breakout; with Notes

March 27, 2019

Job# 1819 to 1819, Bid Item# 3 to 3

DESCRIPTION	UNIT	QTY	COST	EXT COST	O/H RATE	O/H	EXT PRICE
Job 1819 SAN MARINO USD-HUNTINGTON MS							
DESCRIPTION OF CHANGE:							
Bid Item 3 PCO_SUPPLY AIR VERTICAL DUCT RISER SUPPORT							
Furnish and Install 45 Elbow Fittings and Wall Supports Per Detail 17/-							
1. Field Labor Hours	Hr	32.00	86.57	2,770.24	15.00	415.54	3,249.49
2. Shop Labor Hours	Hr	52.00	86.57	4,501.64	15.00	675.25	5,280.42
.....Including ductwork fitting fabrication and,							
.....Material procurement and delivery							
General duct on wall support fabrication:							
.....Fabricate 2"x2x 1/8" angle wall supports per detail 17 fig. B	Hr	24.00	86.57	2,077.68	15.00	311.65	2,437.12
Equipment and Materials:	Lot	1.00	3,600.00	3,600.00	15.00	594.00	4,645.08
Ductwork fabrication materials and components including:							
.....Four bolt corners and clips							
.....Four bolt flanges and gaskets							
.....1/4" bead sealant seam							
.....Duct sealer							
.....Galvanized 18 ga. sheet steel, lock-forming grade							
.....Insulation liner, 2" thick 1-1/2# density w/ pins & clips							
.....2" Air foil vane and vane rail							
.....Misc. TEK screws, bolts and nuts							
General duct on wall support materials:							
.....2"x2"x 1/8" galvanized A36 steel angle, 20-ft lengths	Ea.	3.00	93.80	281.40	15.00	46.43	363.09
.....3/4" dia. epoxy anchor with 7-1/2" embedment at masonry wall	Ea.	14.00	90.00	1,260.00	15.00	207.90	1,625.78

HVAC COP * 03 R

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LCC Bid Item Breakout: ~~Original Notes~~

Mar 27, 2019

DESCRIPTION	UNIT	QTY	COST	EXT COST	O/H RATE	O/H EXT PRICE
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Bid Item Totals: 17,600.98

Grand Totals: 17,600.98

HVAC COP*03R

5/11

HVAC COP#03R

6/11

JOB 521 COR'S: CHANGE ORDERS...
ESTIMATE 5 1819: 1819 HMS - RFI #06
DATA SET 4 CHRIS' & JP DATABASE!!

Combined All - Estimate File Pricing
Liberty Climate Control, Inc.
2447 North Chico Avenue
South El Monte, CA 91733
(626) 575-3131 / (626) 575-4936
chris@libertyclimate.com

PRINTED 8/28/2018 5:01:10 PM
MATERIAL Primary
LABOR Primary

NOTES

Item						Material		Field Labor		Shop Labor	
Category	Size	Item Desc	Qty	UOM	Item Source	Mat Unit	Mat Ext	Fld Unit	Fld Ext	Shp Unit	Shp Ext
Rectangular ...	MFG'D (LRG...	Four Bolt Corners a...	48.00	ea		0.36	17.28	Skip	0.0000	0.0188	0.9024
Rectangular ...	MFG'D (LRG...	Four Bolt Corners a...	116.00	ea		0.24	27.84	Skip	0.0000	0.0188	2.1808
Rectangular ...	1/8" Neopren...	Four Bolt Flanges a...	116.00	'		0.24	27.84	0.0189	4.5224	Skip	0.0000
Rectangular ...	MFG'D (LRG...	Four Bolt Flanges a...	232.00	'		0.48	111.36	Skip	0.0000	0.0208	4.8256
TAPE & SEA...	Unsize	1/4" Bead Sealant S	100.22	'		Skip	0.00	0.0245	2.4553	0.0051	0.0111
TAPE & SEA...	WDS Duct S...	DUCT SEALER/5 G...	0.02	Pail		97.05	1.92	Skip	0.0000	Skip	0.0000
FAB MATERI	18 ga	GALVANIZED	1,108.09	lbs	Rect Elbo...	0.69	765.58	0.0019	65.3423	0.0220	24.3484
FAB MATERI	2"	Insulation Liner 1 1/...	465.58	sq ft		0.82	381.78	Manual	0.0000	0.0227	10.5814
FAB MATERI	2"	Air Foil Vane	929.69	'		2.00	1859.38	Skip	0.0000	0.0109	12.1536
FAB MATERI	2"	Vane Rail	180.63	'		2.00	361.26	Skip	0.0000	0.0109	1.8688
COMPONEN	8# x 3/4"	TEK Screws	348.00	ea		0.02	6.96	0.0056	1.9456	0.0069	2.4012
COMPONEN	3/8" x 3/4"	BOLTS-----REG	24.00	ea		0.05	1.20	0.0042	0.1658	0.0056	4.1344
COMPONEN	3/8"	NUTS-----REG	24.00	ea		0.03	0.72	0.0056	0.1344	0.0083	0.1992
COMPONEN	2"	PINS & CLIPS	93.12	ea		0.03	2.79	0.0100	0.9312	0.0028	0.2607
COMPONEN	WIT Adhesive	DUCT ADHESIVE/...	0.04	Drum		650.43	24.63	Skip	0.0000	Skip	0.0000
Grand Totals							3,589.14		43.4954		58.4476

Breakdown of
\$3,600 material
cost previously
provided.

Field labor hours
reduced to 32-hrs.

Shop labor hours
reduced to 52-hrs.

HVAC COP #03 R

7/11



LIBERTY CLIMATE CONTROL INC.
2447 North Chico Ave
South El Monte CA 91733
(626) 575-3131

License: 327683

Request For Information

Date of Request: 08/09/2018

RFI#: 6

Prepared By: CHRISTOPHER GUNTHER

To: SHENK DEVELOPERS
210 NORTH CENTRAL AVE #225
GLENDALE CA 91203

Project: 1819
SAN MARNO USD-HUNTINGTON MS
1700 HUNTINGTON DR
SAN MARINO CA 91108

You are hereby invited to provide information on the following items.

Information must be received prior to to be considered.

☐

Potential Change in
Project Schedule

☐

May require a
Change Order

☐

Requires a Change
of Plans/Specifications

☐

Building section view 1/A3.11 shows 88x20 (L) supply ducts rising up vertically from 24x24 (L) ducts before turning to penetrate new block wall at C-line into gymnasium.

We have been unable to locate a detail showing how these vertical duct risers are supported.

Please review contractor sketch SK-01-08-09-2018-1819 and advise if wall supports are needed.

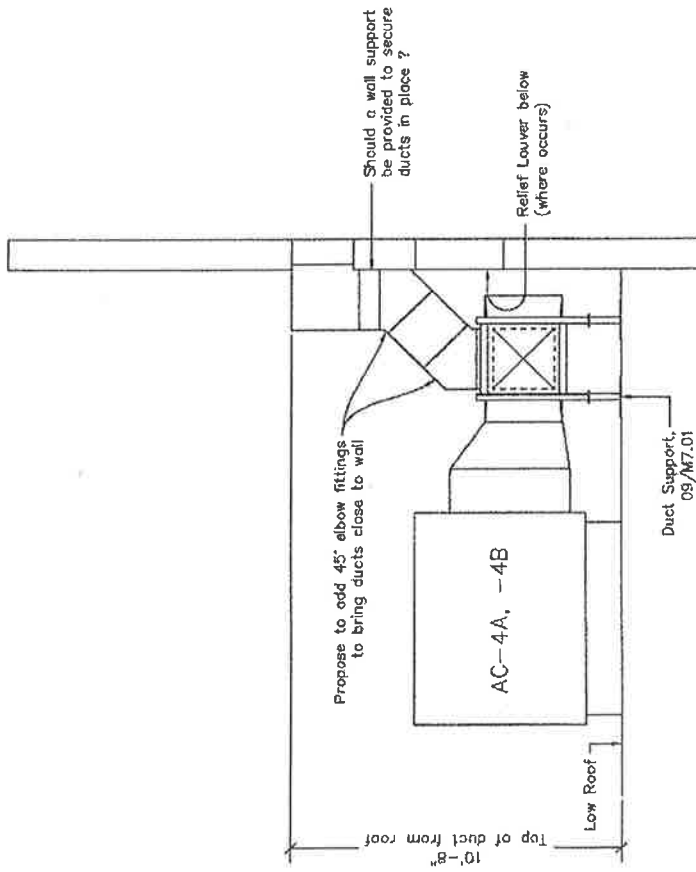
Best Regards,

Information Supplied:

Adding 45's to bring duct close to wall is acceptable. Please see attached sketch (page 5) detailing how the 90x30 duct shall be supported by the exterior wall.

T. Edwards, LPA
08/20/18

GYMNASIUM
N-106



Should a wall support
be provided to secure
ducts in place?

Propose to add 45° elbow fittings
to bring ducts close to wall

AC-4A, -4B

Relief Louver below
(where occurs)

Duct Support,
09/M7.01

Low Roof

10'-8"
Top of duct from roof

Liberty Climate Control, Inc.
2447 North Chico Avenue
S. El Monte, CA 91733
626.575.3131 (O)
626.575.4936 (F)

SK-01-08-09-2018-1819

HVAC COP#03 R

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A3.11

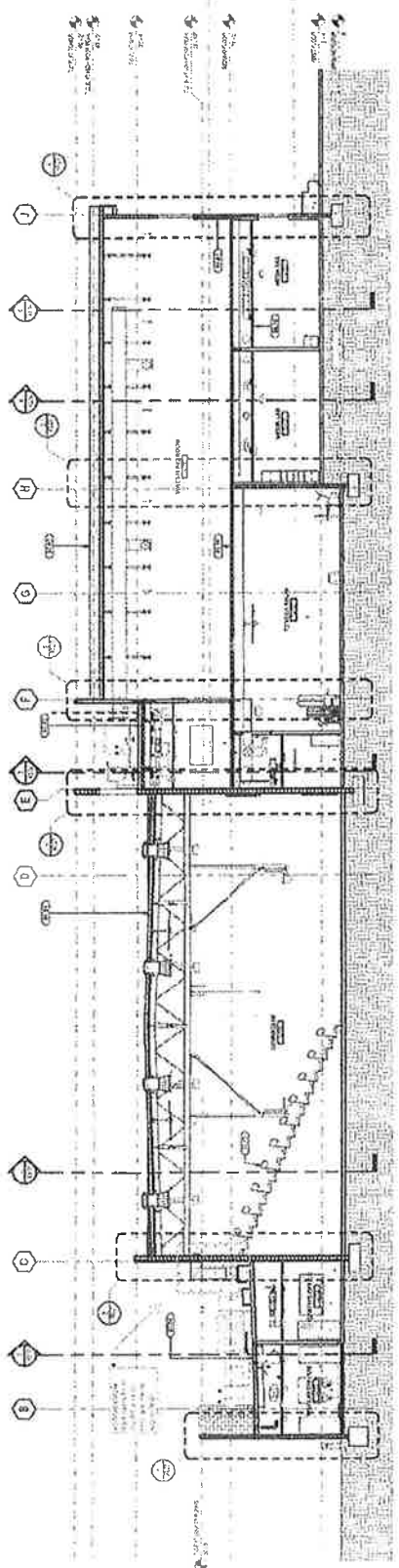
BUILDING
SECTION

Designed by
1230 Huntington Drive
San Marino, CA 91108
HUNTINGTON KIDOLE SCHOOL
San Marino City School District

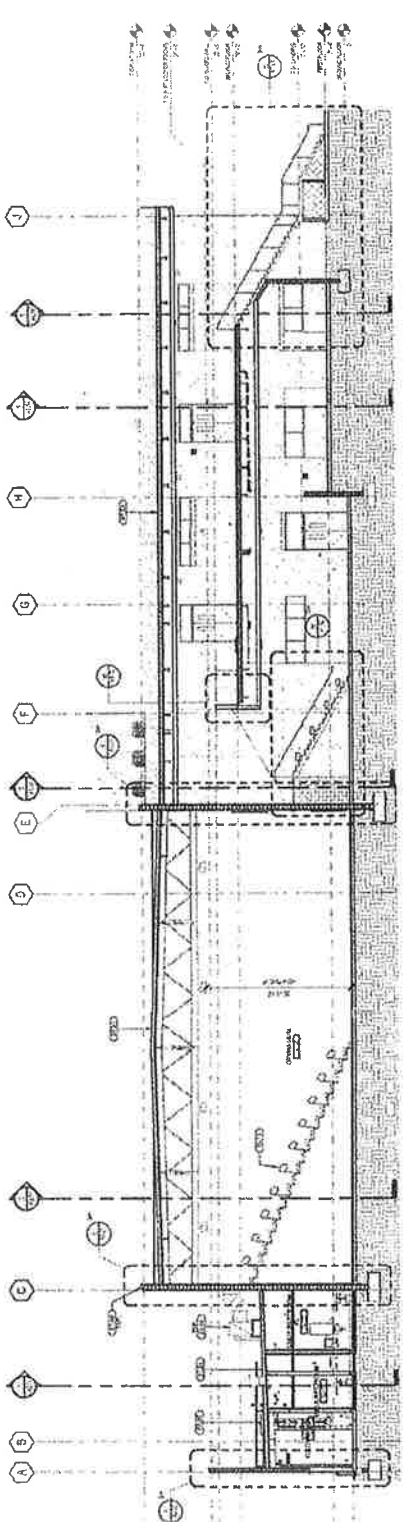


LPA

LONGITUDINAL SECTION 1



LONGITUDINAL SECTION 2



KEY PLAN



KEY PLAN



LEGEND



NOTES

1. PROVIDE ALL WORK TO BE DONE BY THE CONTRACTOR TO BE SHOWN ON THE DRAWINGS.
2. PROVIDE ALL WORK TO BE DONE BY THE CONTRACTOR TO BE SHOWN ON THE DRAWINGS.
3. PROVIDE ALL WORK TO BE DONE BY THE CONTRACTOR TO BE SHOWN ON THE DRAWINGS.

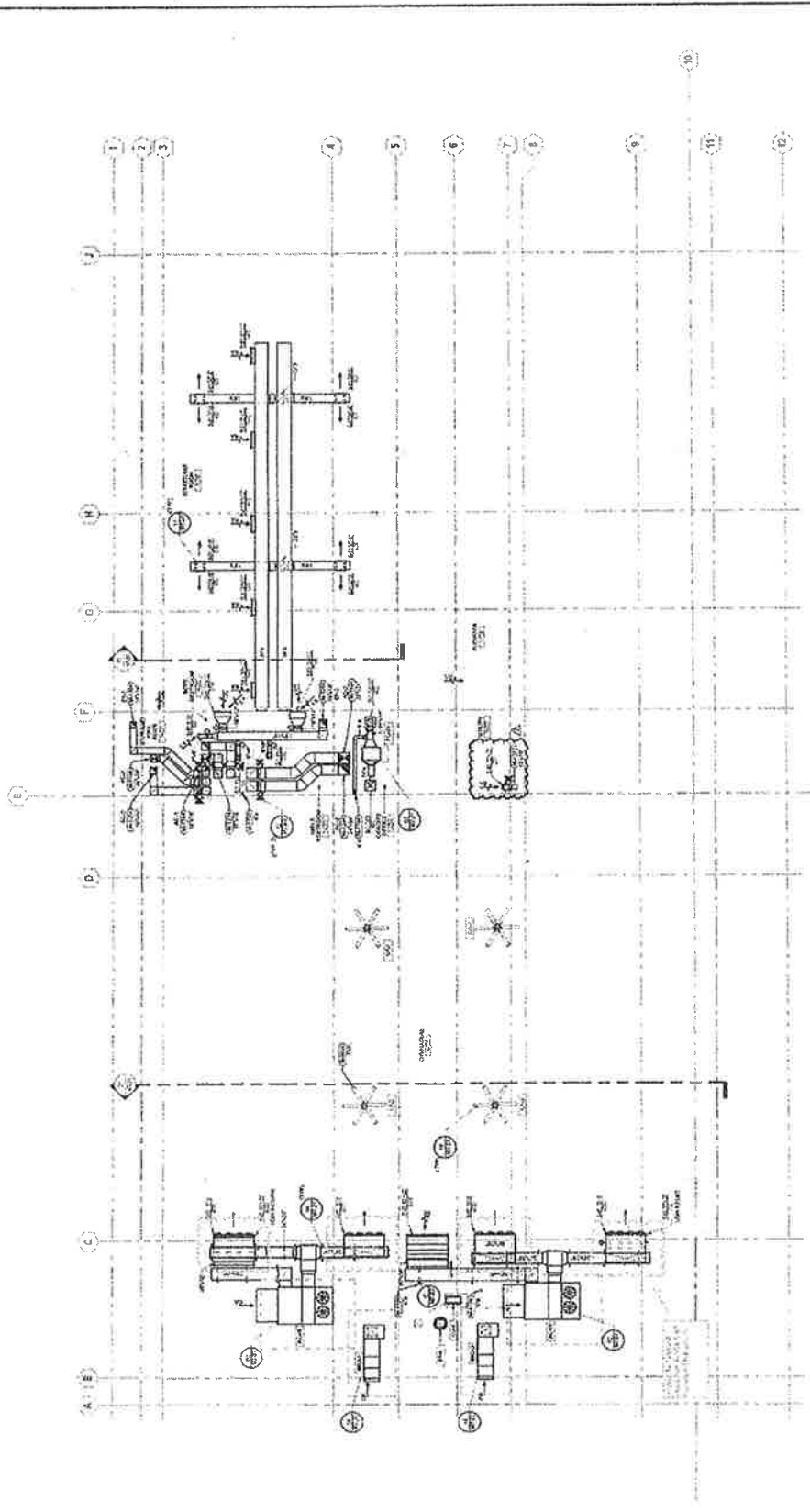
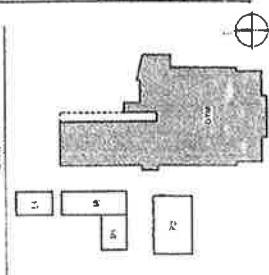
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FIG. A - SUGGESTED SIZING

DUCT SIZE	BAND
18"X12"	1 1/2"X16 GA.
24"X20"	1"X1/8"

TABLE 4-4

DUCT GAUGE	ALLOWABLE LOAD PER FASTENER*
28, 26	25 LB
24, 22, 20	35 LB
18, 16	50 LB

* WELD, BOLT, OR NO. 8 SCREW (MIN.) DEVIATION PERMITTED BY OTHER ANALYSIS. X=1", Y=2", ADD OTHERS TO ACCOMMODATE LOAD MINIMUM OF 3 ON 24" WIDTH AND UP. ADD ALONG SIDES NEAREST ANCHORS.

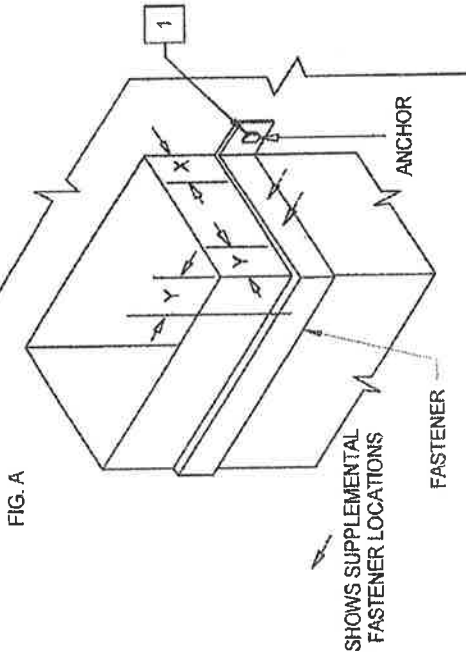
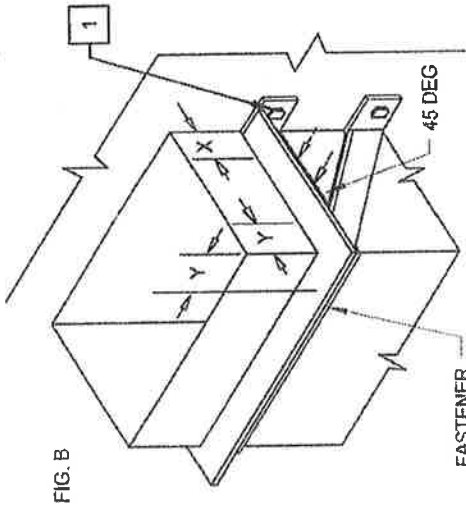


FIG. B - SUGGESTED SIZING

DUCT SIZE	BAND
90"X30"	2"X2X1/8"

- 1 1/2" HILTI KB-TZ (4" EMBED) TYP. AT CONCRETE WALLS
- 3/4" DIAMETER EPOXY ANCHOR (PER STRUCTURAL GENERAL NOTES, SHEET S0.01) WITH 7-1/2" EMBEDMENT, TYP. @ FULLY GROUTED BRICK MASONRY WALLS



NOTES:

1. BRACKETS ARE SIZED FOR 12' OF DUCT MAXIMUM.
2. LOCATE DUCTS AGAINST WALL OR MAXIMUM OF 2" AWAY FROM WALL.
3. EACH WALL ANCHOR SHALL SATISFY THE FOLLOWING CRITERIA UNLESS OTHER ANALYSIS IS MADE
 - A. TENSILE LOAD = 3/8 X DUCT WEIGHT ; SAFETY FACTOR 4
 - B. SHEAR LOAD = 1/2 X DUCT WEIGHT ; SAFETY FACTOR 4