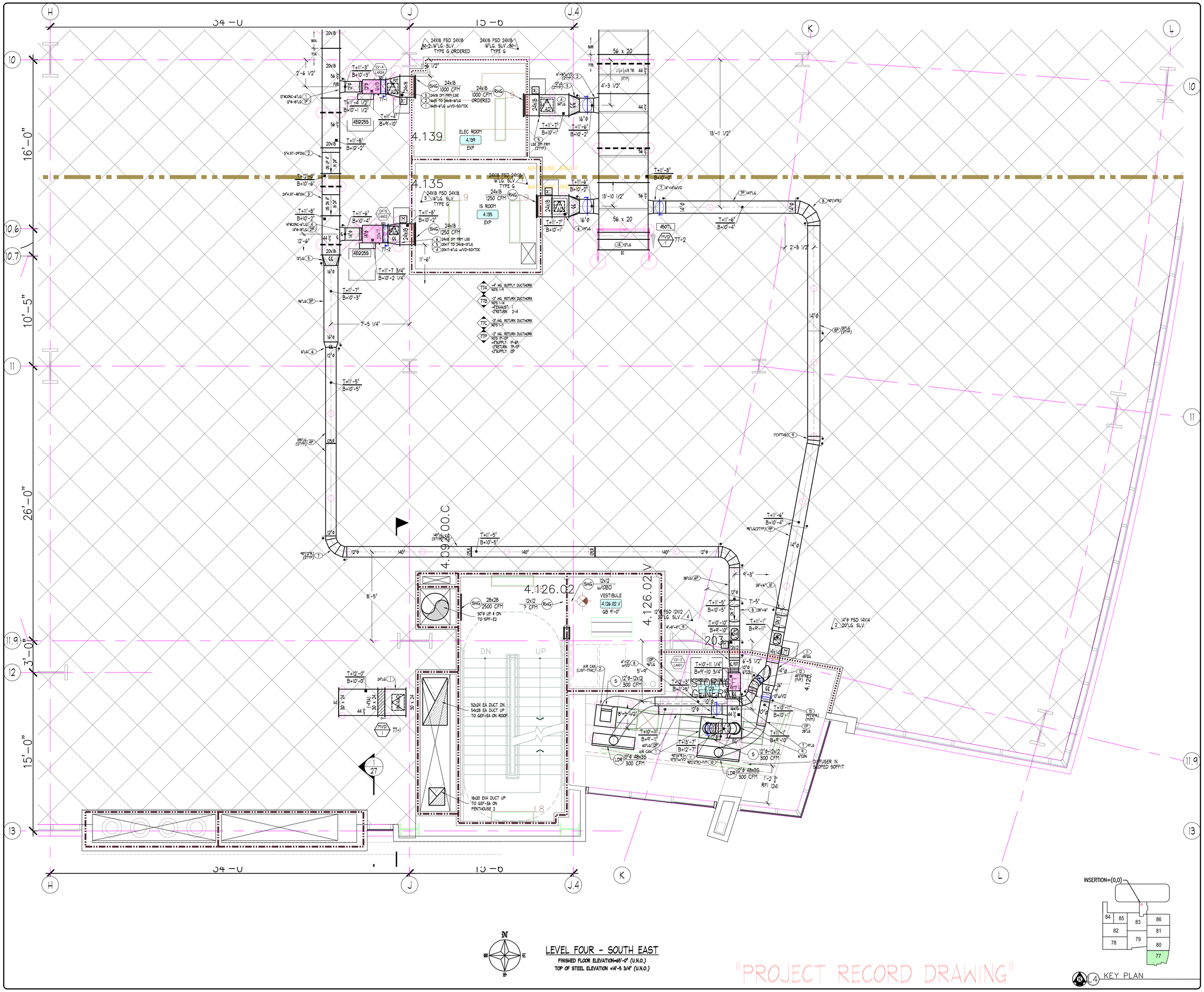


LEVEL FOUR - SOUTH EAST

FINISHED FLOOR ELEVATION=65'-0" (U.N.O.)

TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

INSERTION=(0,0)

KEY PLAN

NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE TO THE DUCT BOTTOM. ALLOWANCES MUST BE MADE FOR DUCTWORK, PIPING, REINFORCING AND EXTERIOR INSULATION WHEN COORDINATING CLEARANCES.

ABBREVIATIONS

AD, AP	ACCESS DOOR, ACCESS PLATE
B, BOTT	BOTTOM
C	CENTERLINE
D, DN	DOWN
DC	DUCTWORK CONNECTOR
DIA	DIAMETER
FM	FIRE DAMPER
FO	FLANGE IN
FI	FLANGE OUT
FOB	FLAT ON BOTTOM
FOS	FLAT ON SIDE
FOT	FLAT ON TOP
H	HEIGHT
W	WIDTH
WG	WATER GAUGE
OS	MALE
O	OFFSET
R	RADIUS
S & D	S & DRIVE CONNECTOR
SMF	SHEET METAL FITTING
SLV	SLEEVE
SP	STATIC PRESSURE
TOP	TOP
TC	THERMAFLEX DUCT CONNECTOR
TH	THROAT
TR	TRANSITION, FITTING
TRANS	TRANSITION
TV	TURNING VANES
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WIDTH
WG	WATER GAUGE
FM	MALE INDICATOR
FF	FEMALE INDICATOR

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION FIRE/SMOKE DAMPER NO.
	MANUAL VOLUME DAMPER WITH ON-DUCT MOTOR AND REGULATOR
	MANUAL VOLUME DAMPER WITH CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	DUCTWORK PIECE NO.
	DIFFUSER, GRILLE, REGISTER
	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
3-4-11	77A	14" HG. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS: 1-4
3-4-11	77B	-14" & -2" HG. EXHAUST & RETURN AIR DUCTWORK PCS: 1-14
3-4-11	77C	-12" HG. SUPPLY AIR DUCTWORK DWNSTREAM OF BOXES PCS: 1-11
3-4-11	77P	PURCHASED SPIRAL & DUCTWORK PCS: IP-2SP
6-2-11	77AC	ARCANS PCS: 1-2

REVISIONS

DATE	NO.	DESCRIPTION
10-28-12	4	AS-BUILT RECORD DRAWING

HARRIS & HART INC.
1759 WEST 1200 SOUTH
OGDEN, UTAH. 84404

PHONE: (801) 731-0577
FAX NO: (801) 731-0580

WEBSITE: WWW.HARRIS-HART.COM

E-MAIL TO DETAILING DEPARTMENT:
ttaylor@harris-hart.com

JOB NO: 9507 PAY ITEM: 77

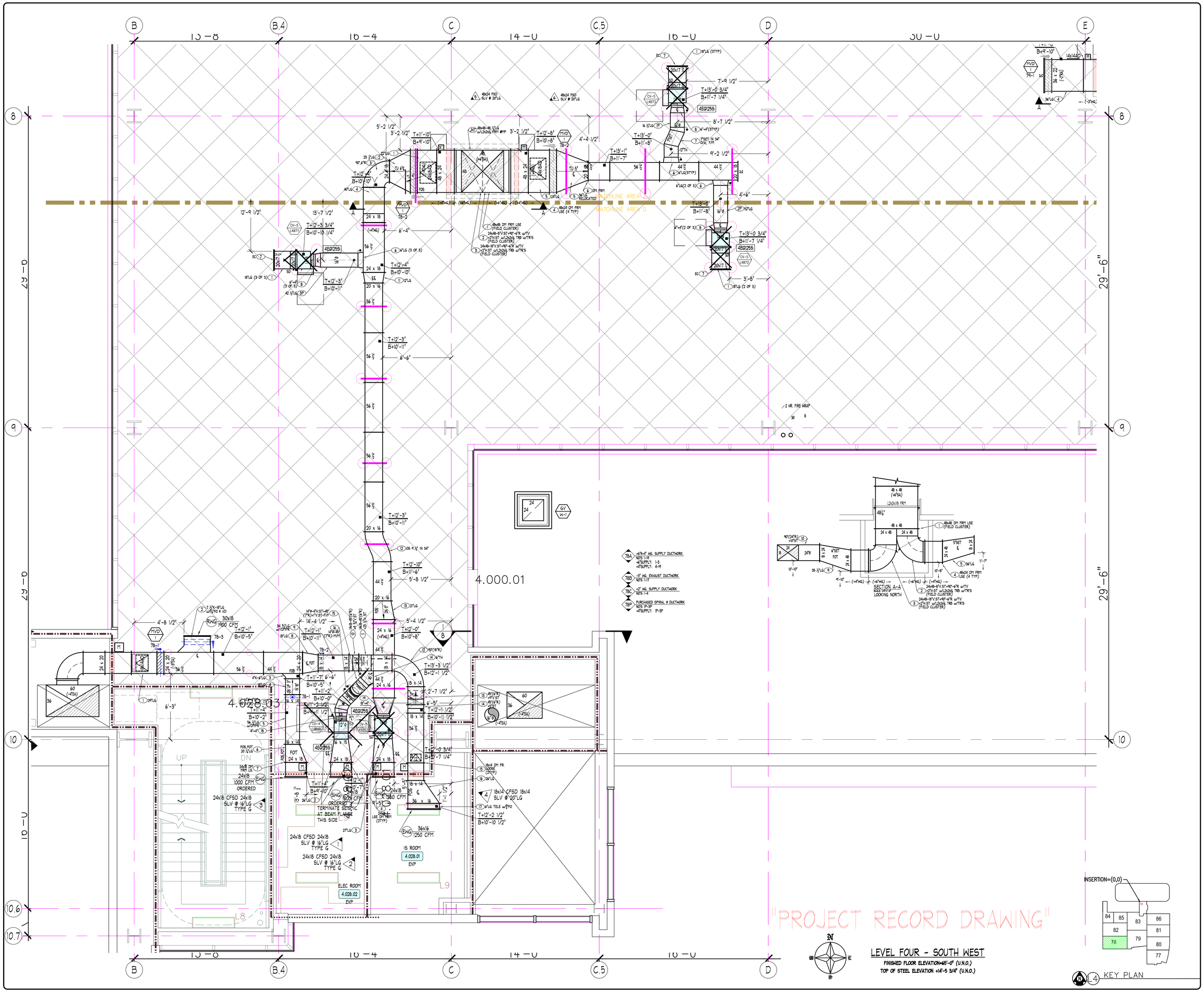
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL FOUR AREA A
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.40 STRUCT: S2.5A&B MECH:M3.4A

BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"

DRAWING NO.
77 OF 115



NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE TO THE DUCT BODY. ALLOWANCES MUST BE MADE FOR FLANGES, SUPPORTS, REINFORCING, AND EXTERIOR INSULATION, WHEN COORDINATING ELEVATIONS.

ABBREVIATIONS

AD, AP	ACCESS DOOR, ACCESS PLATE	S & D	S & A DRIVE CONNECTOR
B, BOTT	BOTTOM	SI	SPIN-IN FITTING
CV	CONTROL VALVE	SLV	SLEEVE
D, DN	DOWN	SP	STATIC PRESSURE
DM	DUCTMATE CONNECTOR	T	TOP
F, FTM	FEMALE	TDC	TRANSVERSE DUCT CONNECTOR
FD	FIRE DAMPER	TV	TURNING VANES
FI	FLANGE IN	TRANS	TRANSITION FITTING
FO	FLANGE OUT	TV	TURNING VANES
FOB	FLAT ON BOTTOM	V	V
FOS	FLAT ON SIDE	VD	VERTICAL VOLUME DAMPER
FOT	FLAT ON TOP	W	WITH
H	HORIZONTAL	WG	WIRE GAUGE
M	MALE	WD	WALL INDICATOR
OS	OFFSET	F	FEMALE INDICATOR
R	RADIUS		

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION FIRE/SMOKE DAMPER NO.
	MANUAL VOLUME DAMPER WITH DIAL OR QUADRANT TYPE REGULATOR
	MANUAL VOLUME DAMPER WITH REMOTE REGULATOR
	CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	DUCTWORK PIECE NO.
	INDICATOR
	DIMENSION FROM BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
3-2-11	78A	14" x 14"ø SUPPY AIR DUCTWORK UPSTREAM OF BOXES PCS-1-01
3-2-11	78B	14"ø EXHAUST AIR DUCTWORK PCS-1-02
3-2-11	78C	12"ø SUPPY AIR DUCTWORK DWNSTREAM OF BOXES PCS-1-03
3-2-11	78P	PURCHASED SPIRAL ø DUCTWORK PCS-1P-3P
8-7-12	P3	14"ø GALV PCS 1-11 (CORRIDOR)

REVISIONS

DATE	NO.	DESCRIPTION
10-25-12	4	AS-BUILT RECORD DRAWING

HARRIS & HART INC.
1759 WEST 1200 SOUTH
OGDEN, UTAH. 84404
PHONE: (801) 731-0577
FAX NO: (801) 731-0580
WEBSITE: WWW.HARRIS-HART.COM
E-MAIL TO DETAILING DEPARTMENT:
ttaylor@harris-hart.com

JOB NO: 9507 PAY ITEM: 78

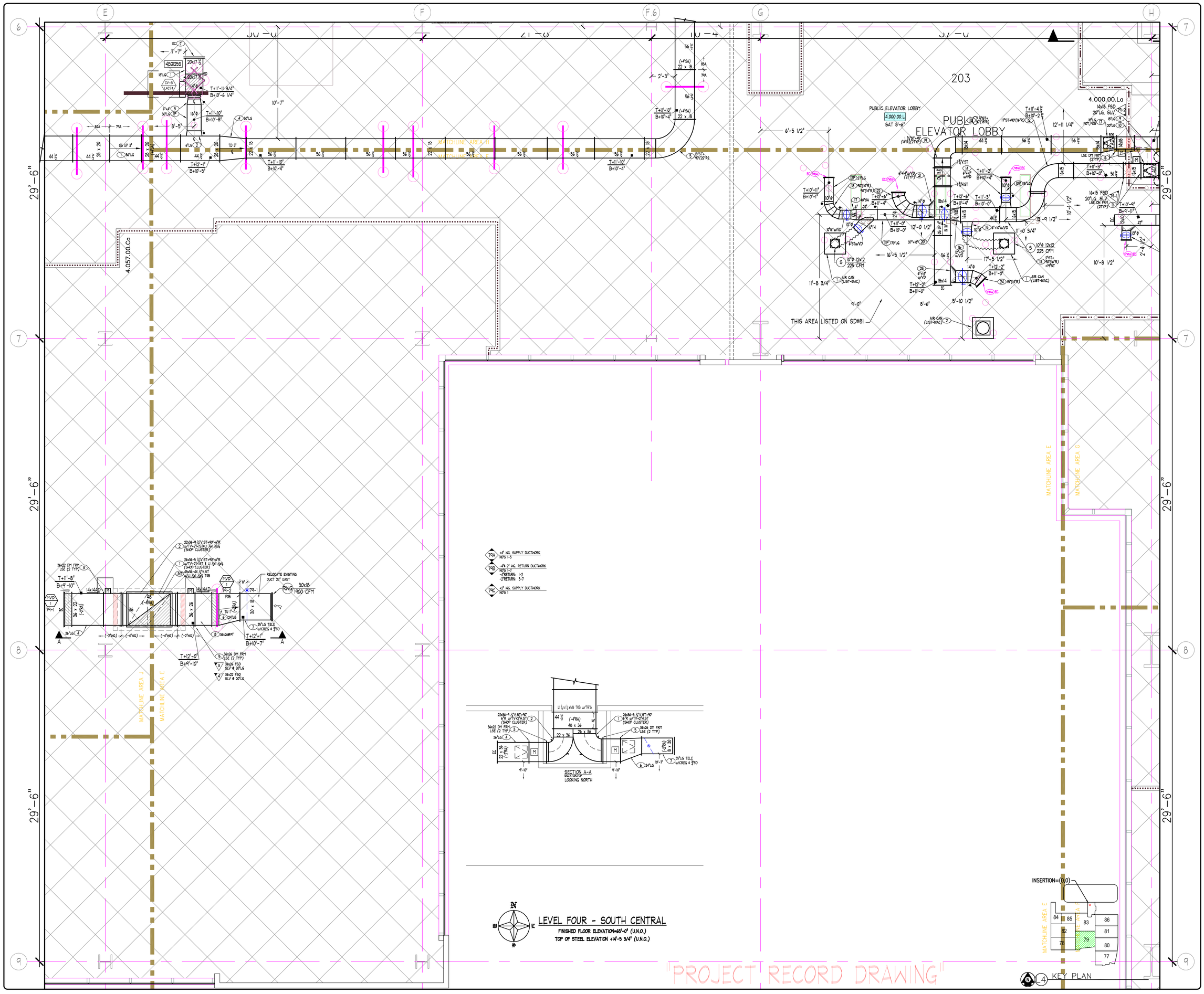
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL FOUR AREA D
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.40 STRUCT: S2.5A&B MECH:M3.40

BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"

DRAWING NO.
78 OF 115



NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE BASED ON STRUCTURAL PLANS AND ARE MADE FOR TRANSVERSE CONNECTORS, FLEXIBLE CONNECTIONS AND EXTERIOR INSULATION WHEN CONSIDERING ELEVATIONS.

ABBREVIATIONS

S & D	S & DRIVE CONNECTOR
SPIN-IN	SPIN-IN FITTING
SLEEVE	SLEEVE
SV	STATIC PRESSURE
SP	SUPPLY
T	TEMPERATURE
TDC	TRANSVERSE DUCT CONNECTOR
TH	THROAT
TRANS	TRANSITION FITTING
TW	TURNING VANES
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WITH
WG	WATER GAUGE
⅌	WALL ANCHORS
⅌	SMALL ANCHOR
⅌	ACCESS DOOR ACCESS PLATE
⅌	BOTTOM
⅌	CENTERLINE
⅌	DOWN
⅌	ELECTRIC CONNECTOR
F. ITEM	FEMALE
FD	FIRE DAMPER
FD	FIRE DOOR
FD	FLANGE OUT
FOB	FLAT ON BOTTOM
FOS	FLAT ON SIDE
FOT	FLAT ON TOP
H	HORIZONTAL
M	MALE
MS	OFFSET
⅌	PIPING

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION FIRE/SMOKE DAMPER NO.
	MANUAL VOLUME DAMPER WITH DIAL OR QUADRANT TYPE REGULATOR
	MANUAL VOLUME DAMPER WITH CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	DUCTWORK PIECE NO.
	INDICATOR
	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

NO.	DESCRIPTION
79A	+4"WG SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS: 1-5
79B	-4" & 2"WG RETURN AIR DUCTWORK PCS: 1-7
79C	+2"WG SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS: 1
80	+4"WG GALV PCS: 1-11 (CORRIDO)

REVISIONS

NO.	DESCRIPTION	DATE
4	AS-BUILT RECORD DRAWING	10-29-12
		3-1-11
		3-1-11
		3-1-11
		8-7-12

HARRIS & HART INC.
1759 WEST 1200 SOUTH
OGDEN, UTAH. 84404
PHONE: (801) 731-0577
FAX NO: (801) 731-0580
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ttaylor@harris-hart.com

JOB NO: 9507 PAY ITEM: 79

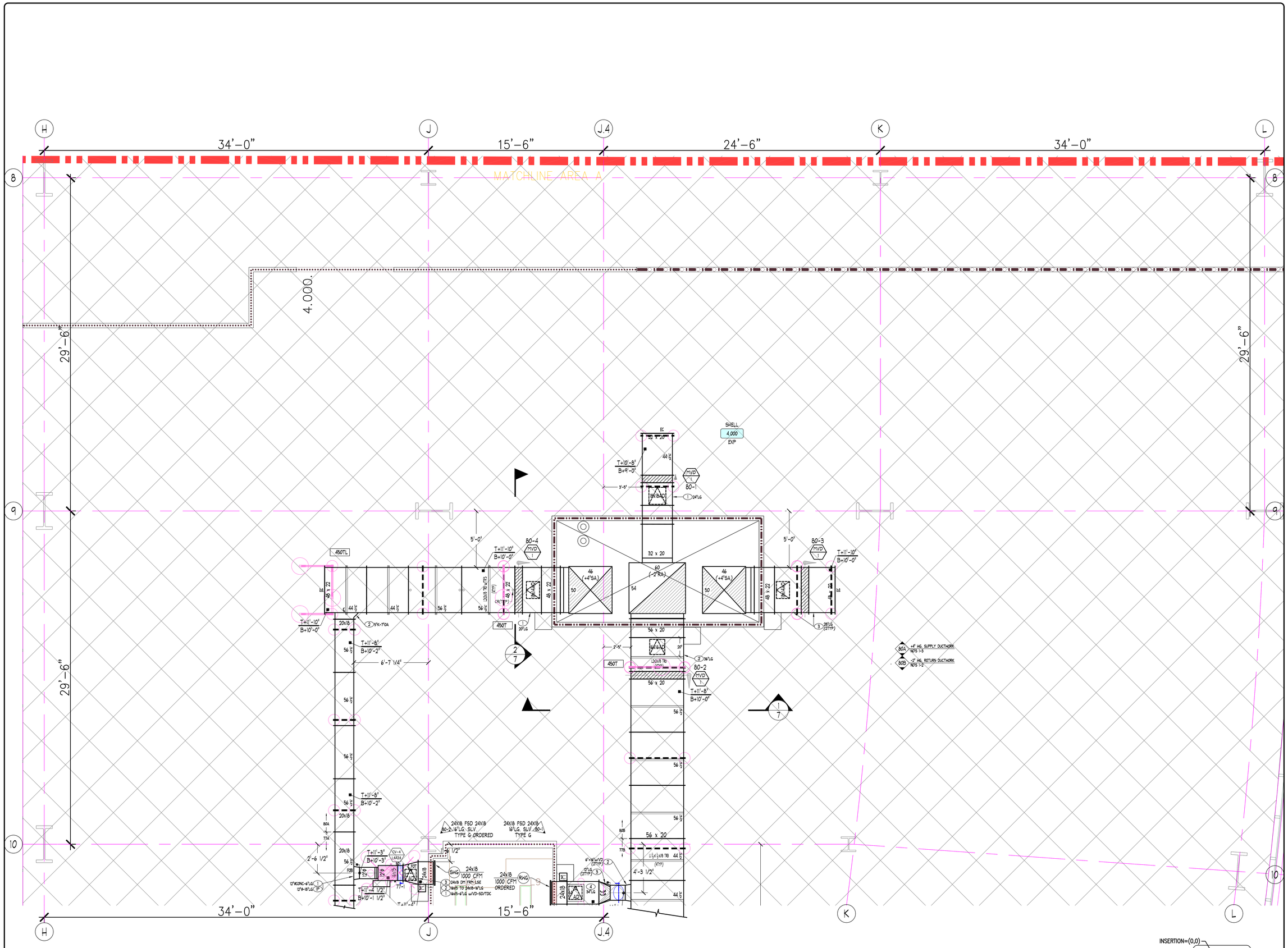
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

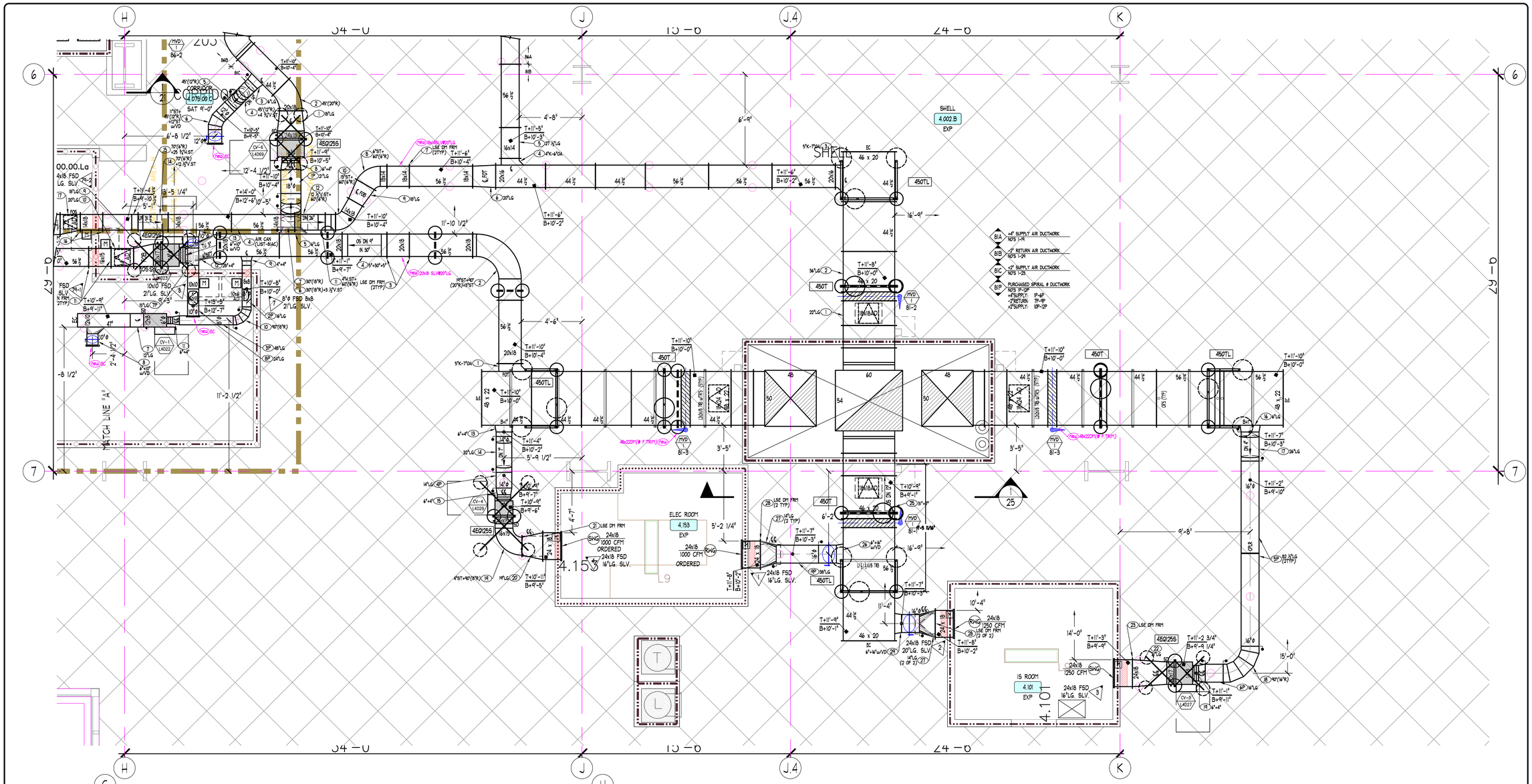
TITLE:
LEVEL FOUR AREA E
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.40 STRUCT: S2.5A&B MECH: M3.4E

BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"

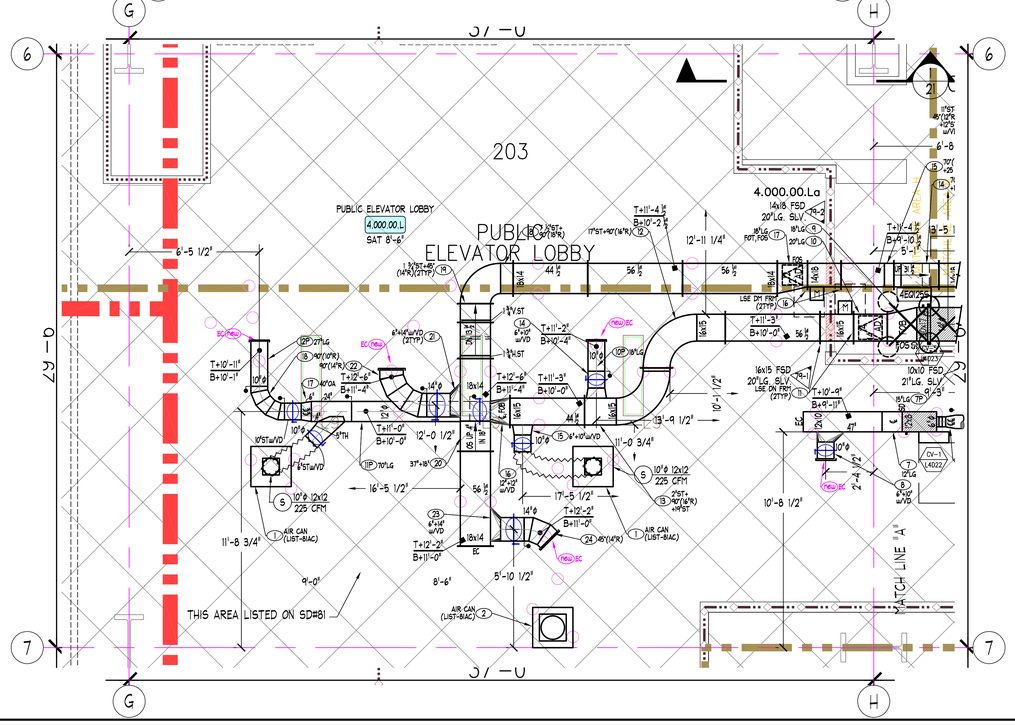
DRAWING NO.
79 OF 115

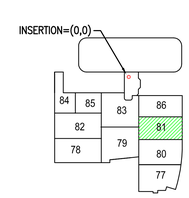

H
J
J.4
K
L
34'-0"
15'-6"
24'-6"
34'-0"
8
9
10
29'-6"
29'-6"
29'-6"
MATCHLINE AREA A
4.000
SHELL
4.000
EXP
BC
T+10'-8"
B+9'-0"
44 1/2
3'-5"
MVD
80-1
24"LG
5'-0"
80-4
T+11'-10"
B+10'-0"
32 x 20
60
(-2"RA)
46
(+4"SA)
50
54
5'-0"
80-3
T+11'-10"
B+10'-0"
450TL
450T
450T
2
7
1
7
56 x 20
80-2
T+11'-8"
B+10'-0"
80A
+4" WG. SUPPLY DUCTWORK
NOTS 1-3
80B
-2" WG. RETURN DUCTWORK
NOTS 1-2
6'-7 1/4"
T+11'-8"
B+10'-2"
20x18
24x18 FSD 24x18
80-2, 16"LG. SLV.
TYPE G ORDERED
24x18 FSD 24x18
16"LG. SLV./80-1
TYPE G
24x18
1000 CFM
24x18
1000 CFM
ORDERED
2'-6 1/2"
4'-3 1/2"
T+11'-3"
B+10'-3"
T+11'-4 1/2"
B+10'-1 1/2"
77-1
T+11'-2"
12"KONC-6"LG
12"x-18"LG
24x18
24x18
56 x 20
44
34"LG
34"LG
(2TYP)
12"LG
(2TYP)
6"x18"x18"VD
(2TYP)
34"LG
(2TYP)
34"LG
(2TYP)
34"LG



LEVEL FOUR - NORTH EAST

FINISHED FLOOR ELEVATION=65'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)





KEY PLAN

"PROJECT RECORD DRAWING"

NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE TO THE DUCT BODY. ALLOWANCES MUST BE MADE FOR FLANGES, JOINTS, REINFORCING AND EXTERIOR INSULATION, WHEN COORDINATING ELEVATIONS.

ABBREVIATIONS

ACCESS DOOR, ACCESS PLATE	S & D
AL, AP	SI
BOTTOM	SD
B, BOTT	SP
CUBIC FOOT/MINUTE	T
C, CFM	TOP
DOWN	TDC
DUCTWORK CONNECTOR	TR
DM	TRANSVERSE DUCT CONNECTOR
F, F TEM	TRANS
FEMALE	TV
FLOW DAMPER	U
FD	V
FLANGE IN	VD
FLANGE OUT	W
FLAT ON BOTTOM	WB
FOB	WS
FLAT ON SIDE	WT
FOS	45
FLAT ON TOP	R
FOT	
HORIZONTAL	
H	
HEIGHT	
OFFSET	
RADIUS	

S & D DENOTES CONNECTOR
SI SPIN-IN FITTING
SD SPLIT DUCT
SP STATIC PRESSURE
T TOP
TOP TRANSVERSE DUCT CONNECTOR
TDC TRANSVERSE DUCT
TR TRANS TRANSITION FITTING
TRANS TURNING VANES
TV U
U V
V VOLUME DAMPER
VD VERTICAL
W WIDTH
WB WITH GAUGE
WS WALL INDICATOR
WT FEMALE INDICATOR
45 OFFSET
R RADIUS

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION
	FIREDAMPER DAMPER NO.
	MANUAL VOLUME DAMPER WITH DIAL
	OP. QUADRANT TYPE REGULATOR
	CEILING MOUNTED REGULATOR
	CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	DUCTWORK PIECE NO.
	INDICATOR
	DIMENSION BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

NO.	DESCRIPTION	DATE
B1A	4"PVC SUPPLY AIR DUCTWORK (INSTALLED IN BOXES)	2-28-11
B1B	2"PVC RETURN AIR DUCTWORK	2-28-11
B1C	2"PVC SUPPLY AIR DUCTWORK (INSTALLED IN BOXES)	2-28-11
B1P	PURCHASED SPIRAL ø DUCTWORK	2-28-11
B1AC	AIRCANS PCS: 1-3,4	6-2-11

REVISIONS

NO.	DESCRIPTION	DATE
5	AS-BUILT RECORD DRAWING	10-25-12

HARRIS & HART INC.
1759 WEST 1200 SOUTH
OGDEN, UTAH. 84404
PHONE: (801) 731-0577
FAX NO: (801) 731-0580
WEBSITE: WWW.HARRIS-HART.COM
E-MAIL TO DETAILING DEPARTMENT:
ttaylor@harris-hart.com

JOB NO: 9507 PAY ITEM: B1

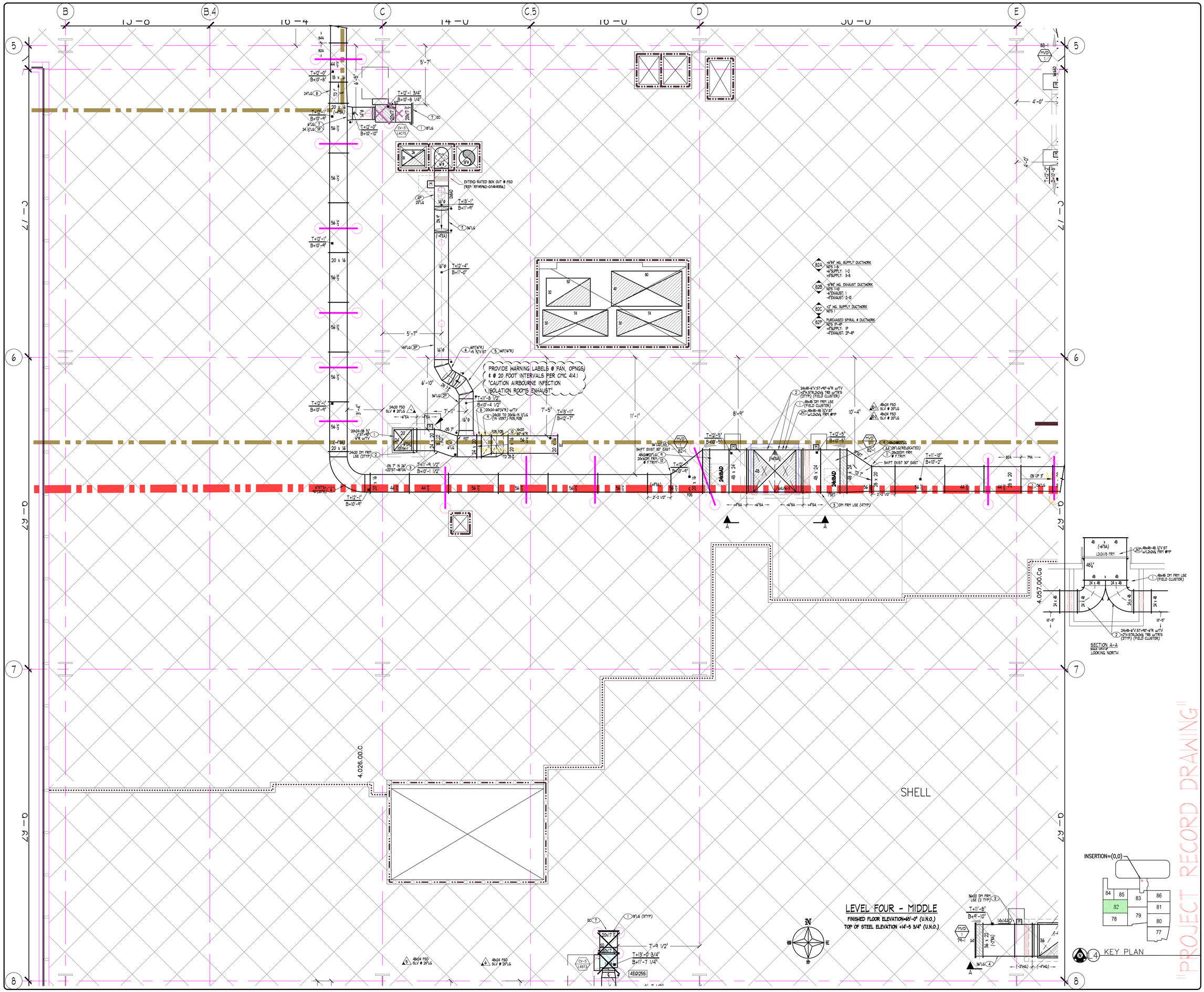
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL FOUR AREA G
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.40 STRUCT: S2.5A&B MECH:M3.4G

BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"

DRAWING NO.
81 OF 115



NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE TO THE DUCT BOOT. ALLOWANCES MUST BE MADE FOR DUCTWORK, FITTINGS, REINFORCING AND EXTERIOR INSULATION WHEN COORDINATING ELEVATIONS.

ABBREVIATIONS

AD, AP	ACCESS DOOR, ACCESS PLATE	S & D	S & D DRYER CONNECTOR
B, BOTT	BOTTOM	SF	SPIN FITTING
C, CL	CENTERLINE	SLEV.	SLEEVE
D, DN	DOWN	SP	STATIC PRESSURE
DW	DUCTWORK CONNECTOR	T	TOP
EXH	EXHAUST	TC	TEMPERATURE DUCT CONNECTOR
FD	FIRE DAMPER	TH	THROAT
FI	FLANGE IN	TRANS	TRANSITION FITTING
FO	FLANGE OUT	TV	TURNING VANES
FOB	FLAT ON BOTTOM	U	UP
FOS	FLAT ON SIDE	V	VERTICAL
FOT	FLAT ON TOP	VD	VOLUME DAMPER
FPM	FEET PER MINUTE	W	WASTE
M	MALE	WG	WATER GAUGE
OS	OFFSET	⇗	WALL INDICATOR
R	RAISED	⇖	FEMALE INDICATOR

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION FIRE/SMOKE DAMPER NO.
	MANUAL VOLUME DAMPER WITH DUAL ACCESS DOORS, SIZE DOOR
	MANUAL VOLUME DAMPER WITH CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	DUCTWORK PIECE NO.
	WALL OPENING
	MALE
	OFFSET
	RAISED
	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

NO.	DATE	DESCRIPTION
B2A	3-7-11	+4" ø 1.4#AL SUPPLY AIR DUCTWORK PCS: 1-8
B2B	3-7-11	-4" ø 1.4#AL EXHAUST AIR DUCTWORK PCS: 1-10
B2C	3-7-11	+2"#AL SUPPLY AIR DUCTWORK (INSTEAD OF BOXES PCS: 1
B2P	3-7-11	PURCHASED SPIRAL ø DUCTWORK PCS: 1P-4P
P0	8-7-12	+4"#AL GALV PCS: 1-11 (CORDOV)

REVISIONS

NO.	DATE	DESCRIPTION
5	10-29-12	AS-BUILT RECORD DRAWING

HARRIS & HART INC.
1759 WEST 1200 SOUTH
OGDEN, UTAH. 84404
PHONE: (801) 731-0577
FAX NO: (801) 731-0580
WEBSITE: WWW.HARRIS-HART.COM
E-MAIL TO DETAILING DEPARTMENT:
ttaylor@harris-hart.com

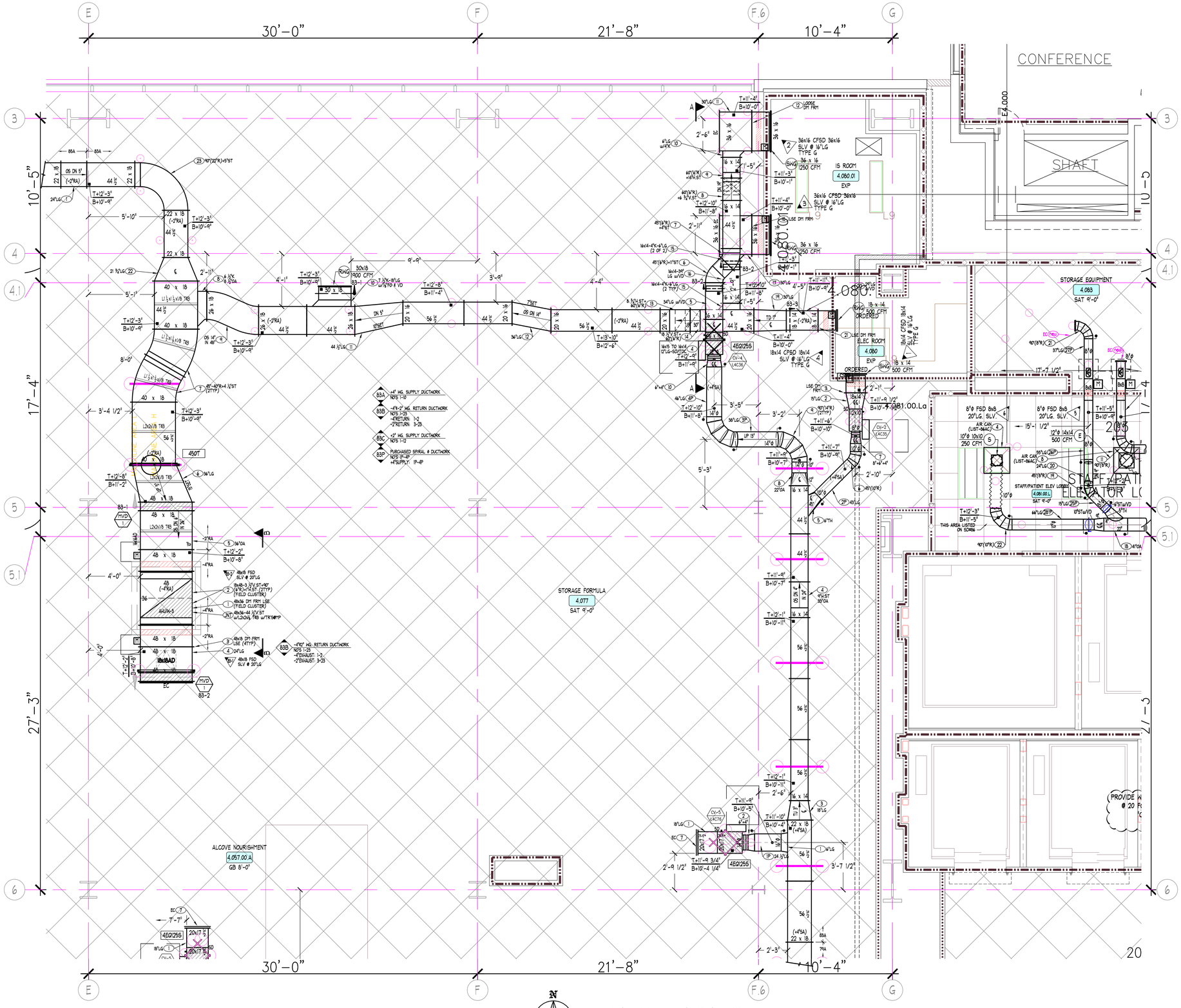
JOB NO: 9507 PAY ITEM: 82

PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL FOUR AREA J
HVAC SYSTEM LAYOUT

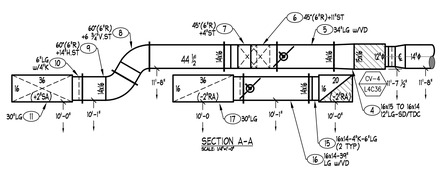
REFERENCE DRAWINGS
ARCH:A3.40 STRUCT: S2.5A&B MECH:M3.4J

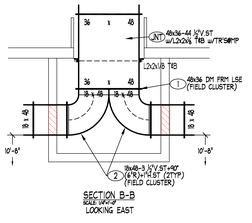
BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"
DRAWING NO. 82 OF 115

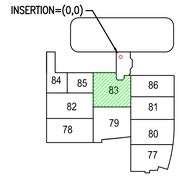


LEVEL FOUR - NORTH WEST

FINISHED FLOOR ELEVATION=65'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)







L4 KEY PLAN

"PROJECT RECORD DRAWING"

NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE TO THE DUCT BODY. ALLOWANCES MUST BE MADE FOR INSULATION, CONDUCTORS, REINFORCING AND EXTERIOR INSULATION WHEN COORDINATING ELEVATIONS.

ABBREVIATIONS

AD, AP	ACCESS DOOR, ACCESS PLATE
B, BOTT	BOTTOM
CLG	CEILING
D, DN	DOWN
DC	DUCTWORK CONNECTOR
DIA	DIAMETER
FT, FTM	FIRE THERMOSTAT
FD	FIRE DAMPER
FI	FLANGE IN
FO	FLANGE OUT
FOB	FLANGE OUT BOTTOM
FOS	FLAT ON SIDE
FOT	FLAT ON TOP
H	HUMIDISTAT
W	WATER GAUGE
MI	MALE INDICATOR
FI	FEMALE INDICATOR
OS	OFFSET
IN	INCHES
S & D	S & DRIVE CONNECTOR
SPIN-IN	SPIN-IN FITTING
SD	SMOKE DAMPER
SP	STATIC PRESSURE
TOP	TOP
T	THERMOSTAT
TDC	TRANSVERSE DUCT CONNECTOR
TH	THROAT
TRANS	TRANSITION FITTING
TV	TURNING VANES
U	U
V	VERTICAL
VD	VOLUME DAMPER
W	WATER
WG	WATER GAUGE
MI	MALE INDICATOR
FI	FEMALE INDICATOR

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION FIRE/SMOKE DAMPER NO.
	MANUAL VOLUME DAMPER WITH DIAL
	MANUAL VOLUME DAMPER WITH LOCK
	MANUAL VOLUME DAMPER WITH THROAT
	CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	DUCTWORK PIECE NO.
	INDICATOR
	ELEVATION OF DUCT BOTTOM
	ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
3-8-11	B3A	+4"WG SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS1-10
3-8-11	B3B	-4"& 2" RETURN AIR DUCTWORK PCS1-25
3-8-11	B3C	+2"WG SUPPLY AIR DUCTWORK UNDSTREAM OF BOXES PCS1-12
3-8-11	B3P	PURCHASED SPIRAL ø DUCTWORK PCS1-P-4P
8-11-12	P0	+4"WG GALV PCS 1-11

REVISIONS

DATE	NO.	DESCRIPTION
10-29-12	5	AS-BUILT RECORD DRAWING

HARRIS & HART INC.
1759 WEST 1200 SOUTH
OGDEN, UTAH. 84404
PHONE: (801) 731-0577
FAX NO: (801) 731-0580
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ttaylor@harris-hart.com

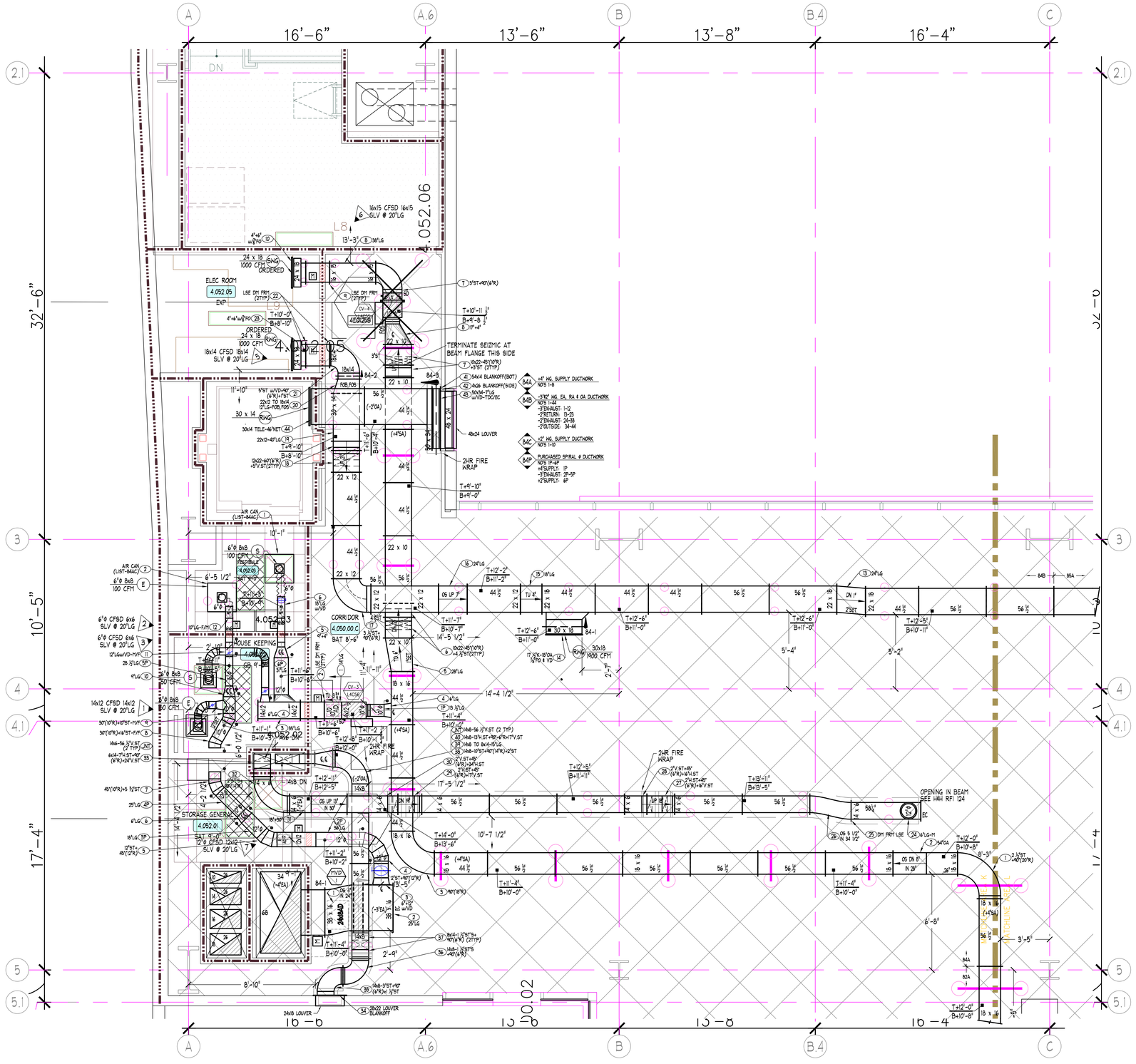
JOB NO: 9507 PAY ITEM: B3

PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL FOUR AREA H
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.40 STRUCT: S2.5A&D MECH:M3.4H

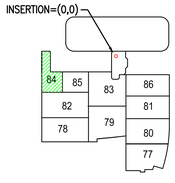
BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"
DRAWING NO.
83 OF 115



LEVEL FOUR - NORTH WEST

FINISHED FLOOR ELEVATION=65'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

"PROJECT RECORD DRAWING"



KEY PLAN

NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE TO THE BOTTOM OF DUCTWORK. ALLOWANCE MUST BE MADE FOR TRANSVERSE CONNECTORS, REINFORCING AND EXTERIOR INSULATION WHEN COORDINATING ELEVATIONS.

ABBREVIATIONS

ACCESS DOOR, ACCESS PLATE	
AC, AIR	
BL, BLOWT	
BOTTOM	
CL	CENTERLINE
D, DN	DOWN
DC	DIAMETER CONNECTOR
F	FEMALE
F, FTM	FIRE DAMPER
FD	FLANGE IN
FO	FLANGE OUT
FOB	FLAT ON BOTTOM
FOS	FLAT ON SIDE
FOT	FLAT ON TOP
H	HORIZONTAL
M	MALE
OS	OFFSET
R	RADIUS
S & D	5" & DRAC CONNECTOR
SPR	SPIN-IN FITTING
SLV	SLEEVE
SP	STATIC PRESSURE
T	TOP
TDC	TRANSVERSE DUCT CONNECTOR
TH	THROAT
TRANS	TRANSITION FITTING
VD	VOLUME DAMPER
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WITH
WG	WATER GAUGE
♂	MALE ANGULATION
♀	FEMALE ANGULATION

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION FIRE/SMOKE DAMPER NO.
	MANUAL VOLUME DAMPER WITH EML OR QUADRANT TYPE REGULATOR
	MANUAL VOLUME DAMPER WITH CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	ACCESS DOOR NO. PLUS NO. MAGNEHELIC
	TOP OF DUCT/BOTTOM OF DUCT ELEVATION MAGNEHELIC

MATERIAL LISTS

DATE	NO.	DESCRIPTION
3-8-11	84A	+4"WG. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS: 1-8
3-8-11	84B	-3½"WG. EXHAUST, RETURN & OUTSIDE AIR DUCTWORK PCS: 1-44
3-8-11	84C	+2"WG. SUPPLY AIR DUCTWORK DWSTREAM OF BOXES PCS: 1-10
3-8-11	84P	PCS: P-4P
6-2-11	84AC	AIRCANS PCS: 1-2

REVISIONS

DATE	NO.	DESCRIPTION
10-25-12	5	AS-BUILT RECORD DRAWING

HARRIS & HART INC.
1759 WEST 1200 SOUTH
OGDEN, UTAH. 84404

PHONE: (801) 731-0577
FAX NO: (801) 731-0580

WEBSITE: WWW.HARRIS-HART.COM

E-MAIL TO DETAILING DEPARTMENT:
ttaylor@harris-hart.com

JOB NO: 9507 PAY ITEM: 84

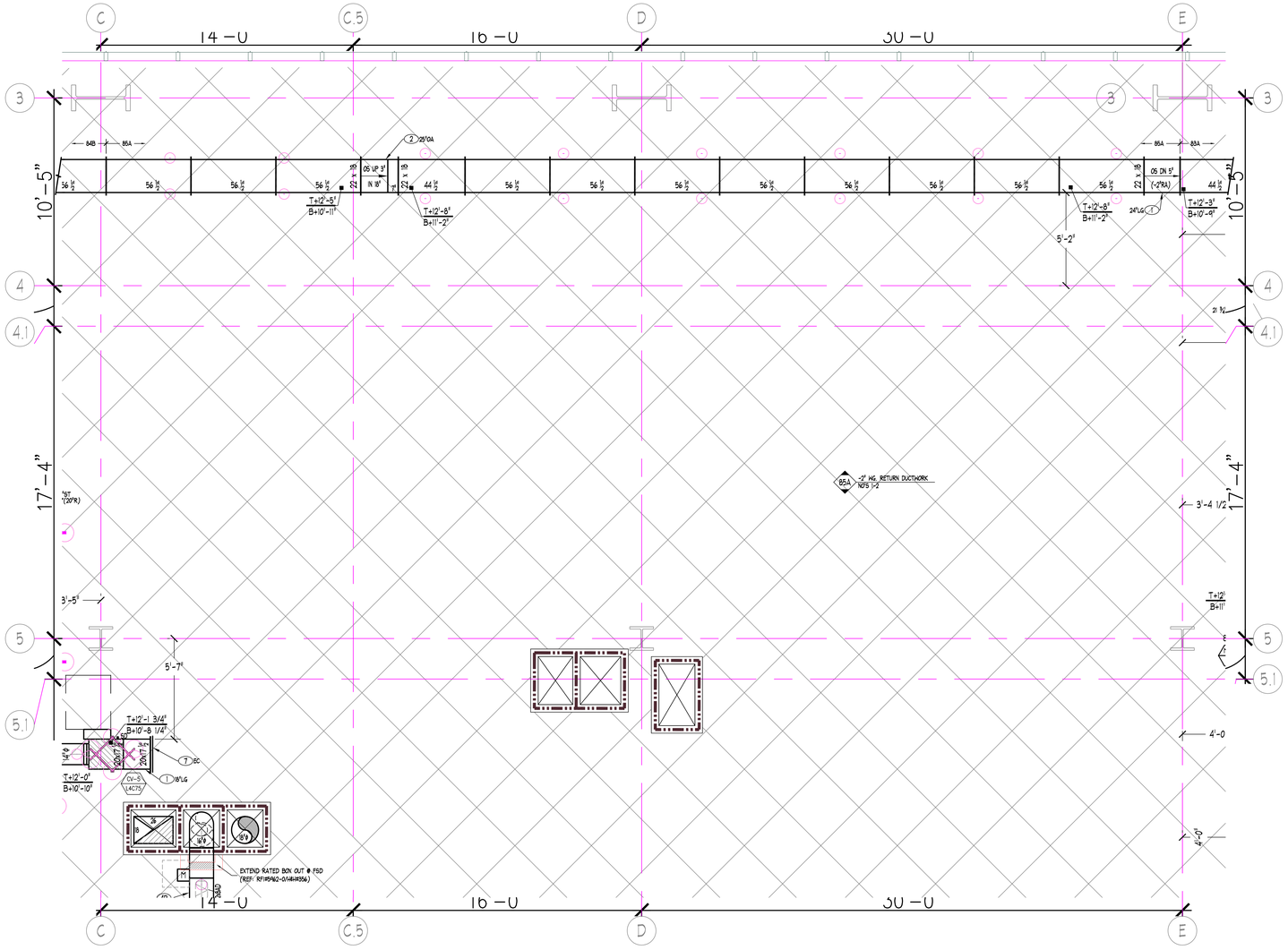
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL FOUR AREA K
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.4D STRUCT: S2.5A&B MECH:M3.4K

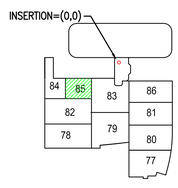
BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"

DRAWING NO.
84 OF 115



LEVEL FOUR - NORTH CENTRAL

FINISHED FLOOR ELEVATION=65'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)



KEY PLAN

"PROJECT RECORD DRAWING"

NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE TO BE STRICTLY ADHERED TO. ADJUSTMENTS MADE FOR TRANSVERSE CONNECTORS, HORIZONTAL AND EXTERIOR REGULATION WHEN COORDINATING ELEVATIONS.

ABBREVIATIONS

AD, UP	ACCESS DOOR, ACCESS PLATE	S & D	S & D SINGLE CONNECTOR
BO, BOTT	BOTTOM	SPW	SPIN-IN FITTING
CL	CENTERLINE	SLV	SLEEVE
DN	DOWN	SP	STATIC PRESSURE
D, DN	DOWNSTREAM CONNECTOR	T	TOP
F, FEM	FEMALE	TDC	TRANSVERSE DUCT CONNECTOR
FD	FIRE DAMPER	TH	THROAT
FL	FLANGE IN	THWG	TRANSITION FITTING
FO	FLAT ON BOTTOM	TW	THERMAL WELL
FOB	FLAT ON SIDE	U	UP
FOS	FLAT ON TOP	V	VERTICAL
FOT	FLAT ON STEM	VD	VOLUME DAMPER
H	HORIZONTAL	W	WITH
M	MALE	WG	WATER GAUGE
OS	OFFSET	⊕	MALE INDICATOR
PG	PAGE	⊖	FEMALE INDICATOR

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION FIRE/SMOKE DAMPER NO.
	MANUAL VOLUME DAMPER WITH HAL OR QUADRANT TYPE REGULATOR
	MANUAL VOLUME DAMPER WITH CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	DUCTWORK PIECE NO.
	DIFFUSER OR RECEIVER
T.O. / B.O.	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

NO.	DATE	DESCRIPTION
86A	3-8-11	-2"WG. RETURN AIR DUCTWORK
PO	8-7-12	+2"WG GALV PC. 7

REVISIONS

NO.	DATE	DESCRIPTION
5	9-23-12	AS-BUILT RECORD DRAWING

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OGDEN, UTAH. 84404

PHONE: (801) 731-0577
FAX NO: (801) 731-0580

WEBSITE: WWW.HARRIS-HART.COM

E-MAIL TO DETAILING DEPARTMENT:
ttaylor@harris-hart.com

JOB NO: 9507 PAY ITEM: 85

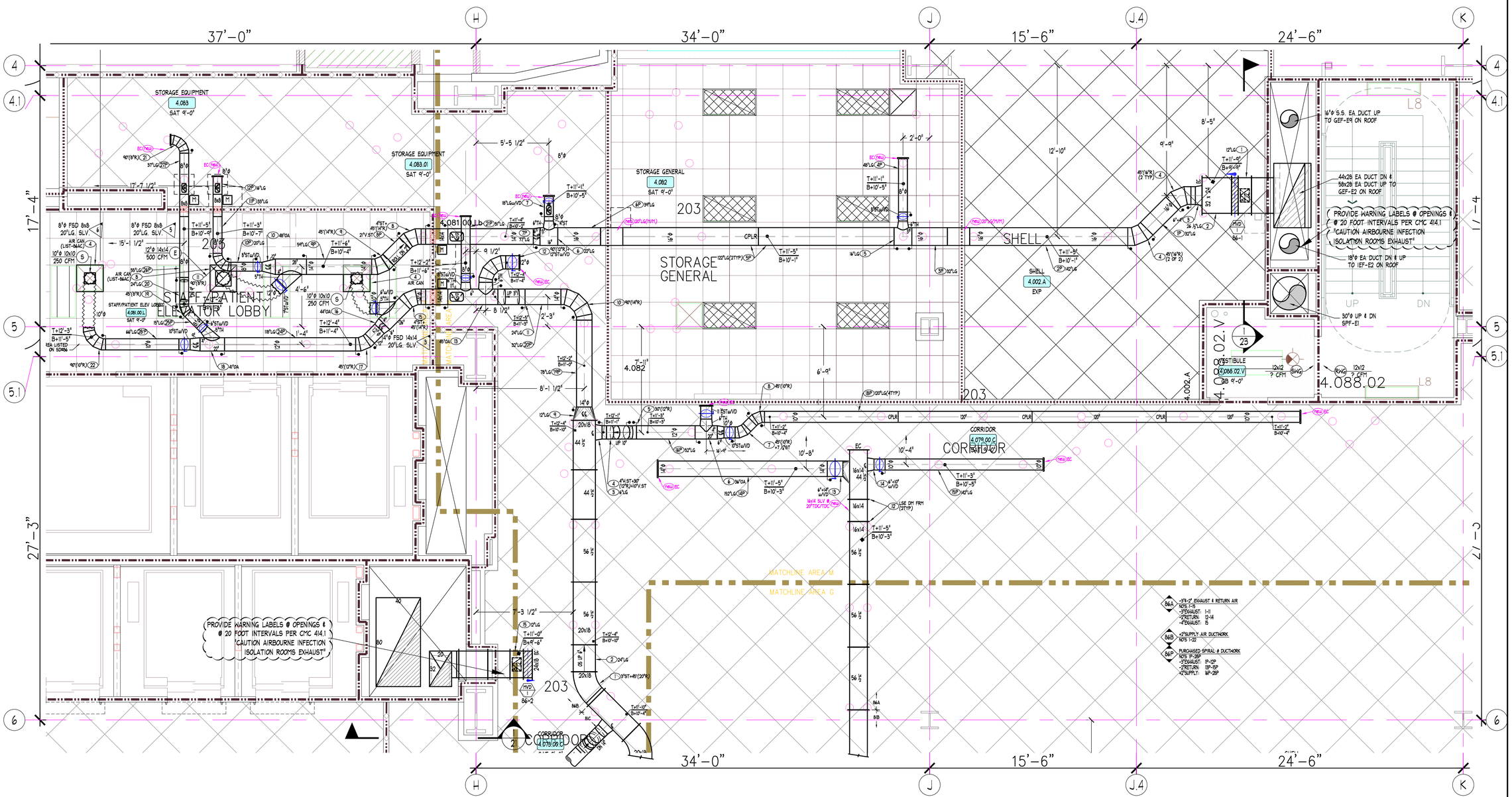
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL FOUR AREA L
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH: A3.40 STRUCT: S2.5A&B MECH: M3.4L

BY:
DATE: 1-27-10
SCALE: 3/8"=1'-0"

DRAWING NO.:
85 OF 115



NOTES

1. ELEVATIONS INDICATED ON THIS DRAWING ARE TO THE DUCT BODY. ALLOWANCES MUST BE MADE FOR INSULATION, FLANGES, REINFORCING, AND EXTERIOR INSULATION, WHEN COORDINATING ELEVATIONS.

ABBREVIATIONS

S & D	S & DRAW CONNECTOR
SI	SPIN-IN FITTING
SLV	SLEEVE
SP	STATIC PRESSURE
T	TOP
TDC	TRANSVERSE DUCT CONNECTOR
TH	THREADED
TRANS	TRANSITION FITTING
TV	TURNING VANES
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WITH
WG	WATER GAUGE
WI	WALL INDICATOR
F-O	FEMALE INDICATOR
AD, AP	ACCESS DOOR, ACCESS PLATE
B, BOTT	BOTTOM
C, CL	CENTER LINE
D, DN	DOWN
DM	DUCTMATE CONNECTOR
F, FTM	FLANGE
FD	FIRE DAMPER
FI	FLANGE IN
FO	FLANGE OUT
FOB	FLAT ON BOTTOM
FOS	FLAT ON SIDE
FOT	FLAT ON TOP
H	HORIZONTAL
M	MITER
SS	OFFSET
R	RADIUS

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	FIRE DAMPER OR COMBINATION
	FIRE/SMOKE DAMPER NO.
	MANUAL VOLUME DAMPER WITH DIAL OR QUADRANT TYPE REGULATOR
	MANUAL VOLUME DAMPER
	CEILING MOUNTED CONCEALED REGULATOR
	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
	DUCTWORK PIECE NO.
	INDICATOR
	DIRECTION/ELEVATION OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

NO.	DESCRIPTION	DATE
86A	-34"x2" & -4"x2" EXHAUST & RETURN AIR	2-25-11
86B	-2"x4" & -2"x2" SUPPLY AIR DUCTWORK, DIAGRAM	2-25-11
86P	PURCHASED SPIRAL & DUCTWORK NOTE 1P-26P	2-25-11
86AC	AIRCAPS FOS: 14-9, 1-8, 9	6-2-12

REVISIONS

NO.	DESCRIPTION	DATE
4	AS-BUILT RECORD DRAWING	10-20-12

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JOB NO: 9507 PAY ITEM: 86

PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL FOUR AREA M
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.40 STRUCT: S2.5A&B MECH: M3.4M

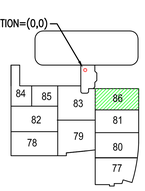
BY: BP
DATE:
SCALE: 3/8"=1'-0"

DRAWING NO.
86 OF 115

LEVEL FOUR - NORTH EAST

FINISHED FLOOR ELEVATION=651'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

INSERTION=(0,0)



KEY PLAN

"PROJECT RECORD DRAWING"