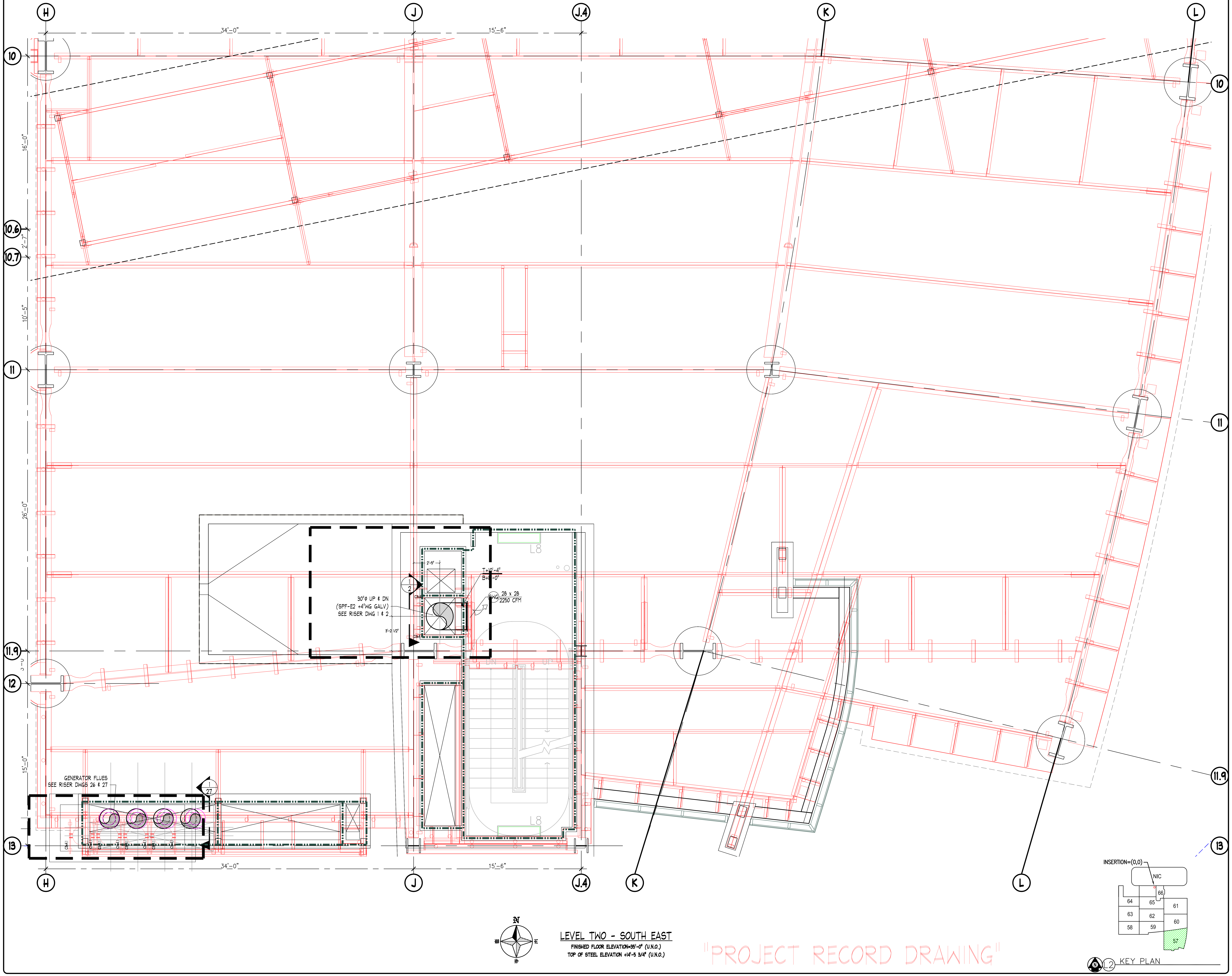


LEVEL TWO - SOUTH EAST

FINISHED FLOOR ELEVATION=35'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

"PROJECT RECORD DRAWING"

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE
B, BOTT	BOTTOM
℄	CENTERLINE
D, DN	DOWN
DM	DUCTMATE CONNECTOR
F, FEM	FEMALE
FD	FIRE DAMPER
FI	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	S & DRIVE CONNECTOR
SI	SPIN-IN FITTING
SLV	SLEEVE
SP	STATIC PRESSURE
T	TOP
TDC	TRANSVERSE DUCT CONNECTOR
TH	THROAT
TRANS	TRANSITION FITTING
TV	TURNING VANES
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WITH
WG	WATER GAUGE
┌●	MALE INDICATOR
┌○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	2	AS-BUILT RECORD DRAWING

SHEET METAL
HARRIS & HART
CONTRACTORS & FABRICATORS

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: 57

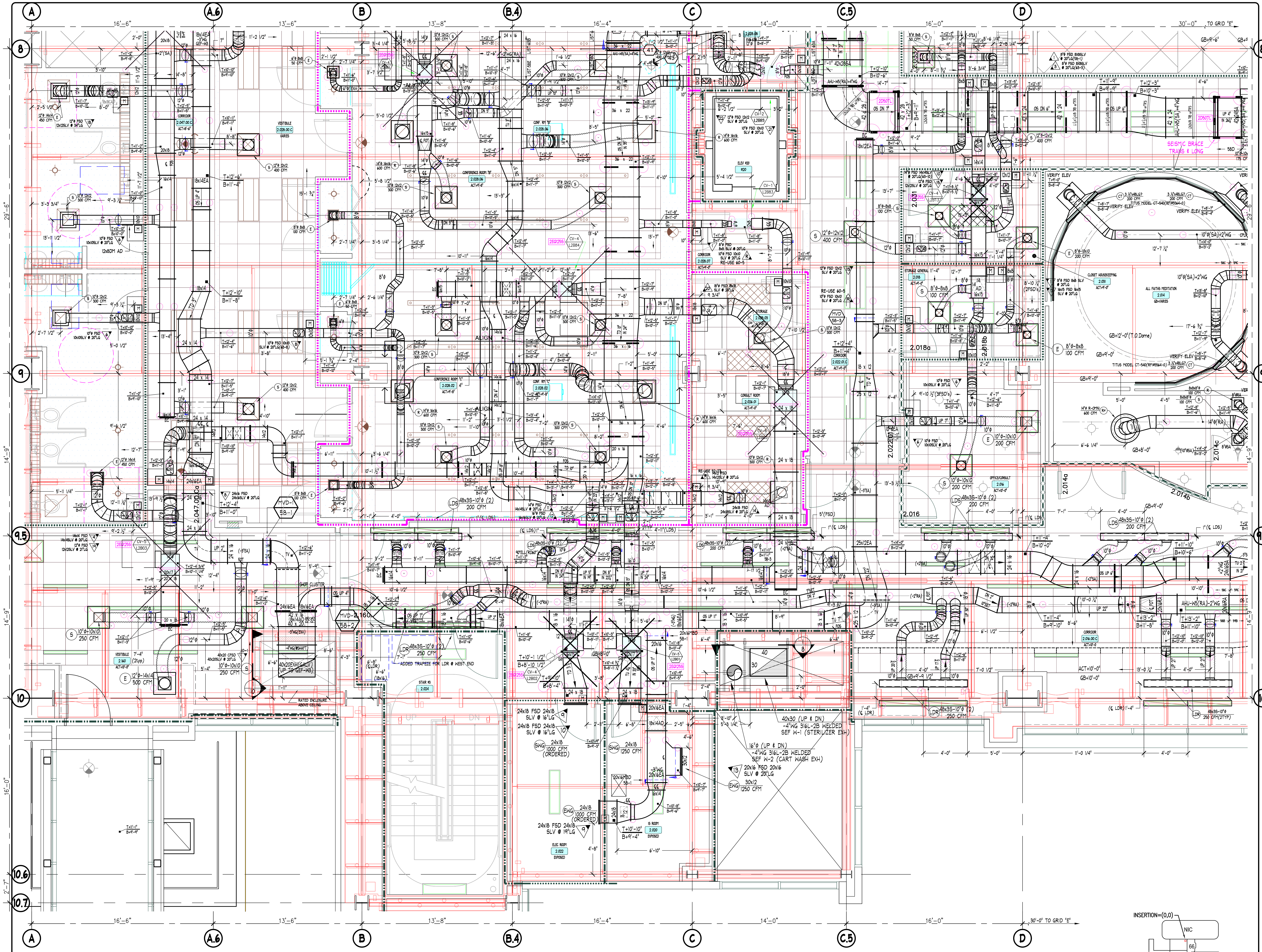
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA A
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH: A3.2A STRUCT: S2.3A MECH: M3.2A

BY: R. FRESTON
DATE: 1–27–10
SCALE: 3/8"=1'–0"

DRAWING NO.
57 OF 115

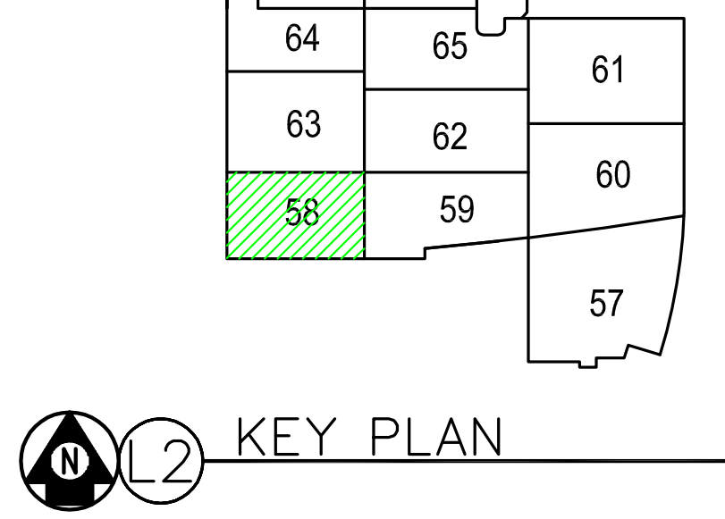


LEVEL TWO - SOUTH WEST

FINISHED FLOOR ELEVATION=35'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

"PROJECT RECORD DRAWING"

INSERTION=(0,0)



KEY PLAN

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE	S & D	S & DRIVE CONNECTOR
B, BOTT	BOTTOM	SI	SPIN-IN FITTING
℄	CENTERLINE	SLV	SLEEVE
D, DN	DOWN	SP	STATIC PRESSURE
DM	DUCTMATE CONNECTOR	T	TOP
F, FEM	FEMALE	TDC	TRANSVERSE 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
H	HORIZONTAL	W	WITH
M	MALE	WG	WATER GAUGE
OS	OFFSET	⌐●	MALE INDICATOR
R	RADIUS	⌐○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
⊠	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
9-29-10	58A	+4"W.G. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-7
9-29-10	58B	-3" & -2"W.G. EXHAUST & RETURN AIR DUCTWORK PCS:1-47
9-29-10	58C	+2"W.G. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-43
9-29-10	58P	PURCHASED SPIRAL Ø DUCTWORK PCS:1P-27P
5-24-11	58AC	AIRCANS PCS: 1-5,6-7
7-14-11	58D	+4"WG. SUPPLY AIR DUCTWORK(CO#134) PCS:1-48
7-14-11	58E	-3"WG. EXH/RA DUCTWORK(CO#134) -3"WG:1-47, -2"WG:48-76
7-14-11	58F	+2"WG. SUPPLY AIR DUCTWORK(CO#134) PCS:1-66
7-14-11	58P+	+4"WG GALV PCS:28-34; +2"WG:35-54; -3"WG:55-75; -2"WG:76-81
10-25-11	58G	+4"WG GALV PCS:1-3; +2"WG:4,5,21; -2"WG: 5-18; -3"WG:19-20
10-25-11	58P+	-2"WG GALV PCS:82-85; -3"WG:86-91
12-13-11	58AC-2	AIRCANS PCS: 1-8, 9-12(CO#134)

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	9	AS-BUILT RECORD DRAWING

SHEET METAL CONTRACTORS & FABRICATORS

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

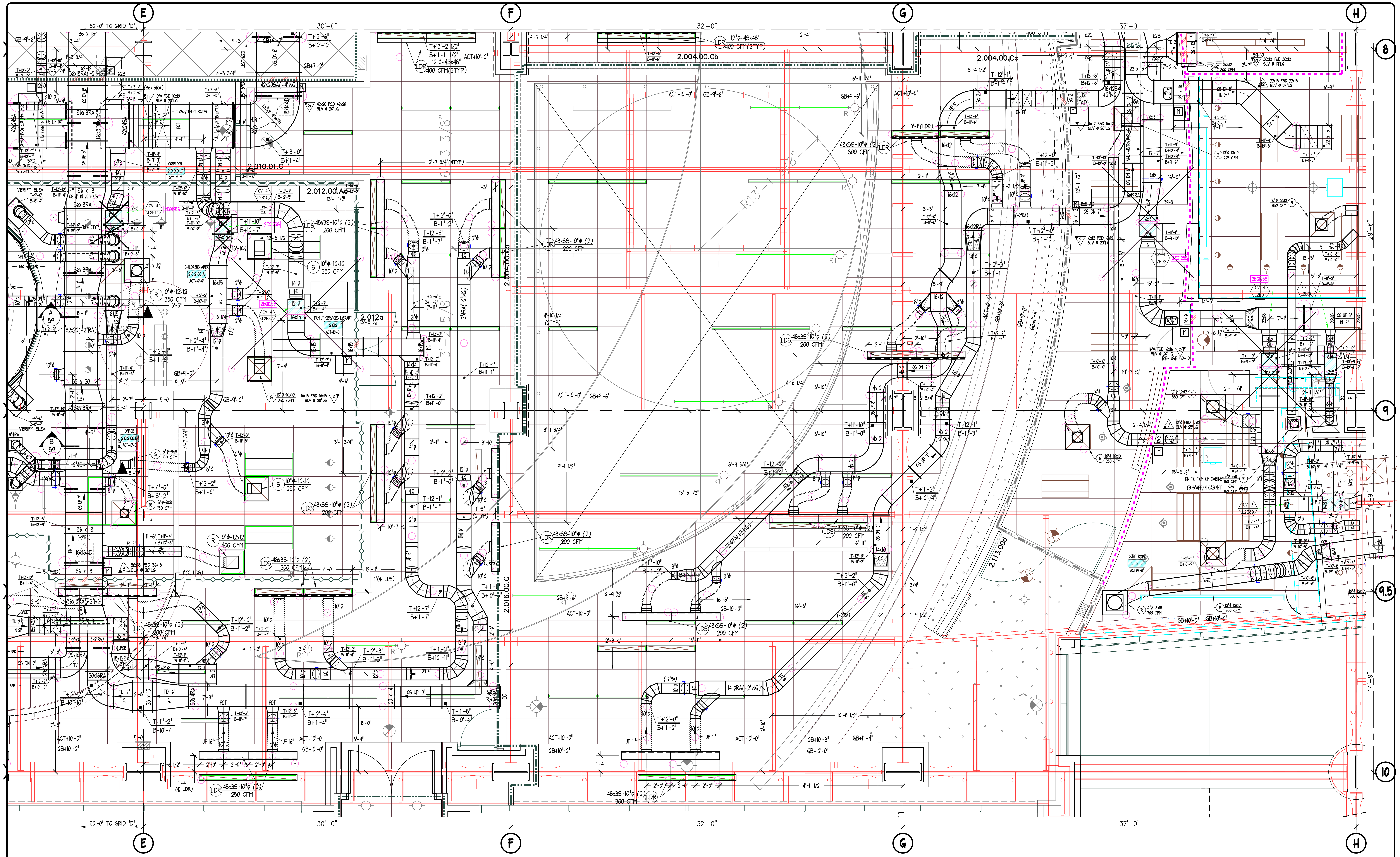
JOB NO: 9507 PAY ITEM: 58

PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA D
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.2D STRUCT: S2.3B MECH: M3.2D

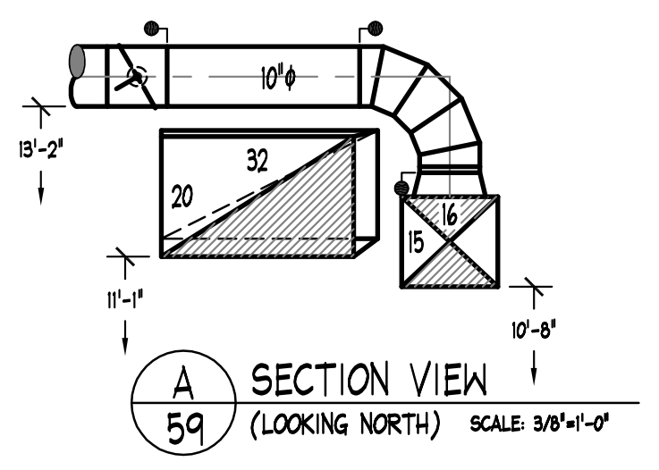
BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"
DRAWING NO.
58 OF 115



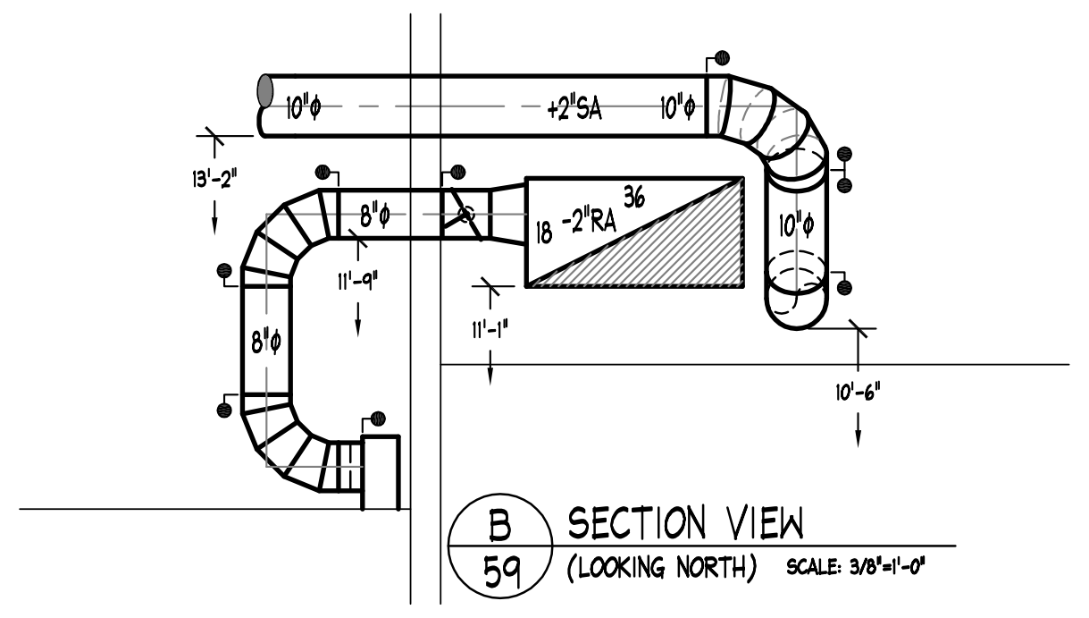
LEVEL TWO - SOUTH CENTRAL

FINISHED FLOOR ELEVATION=35'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

"PROJECT RECORD DRAWING"

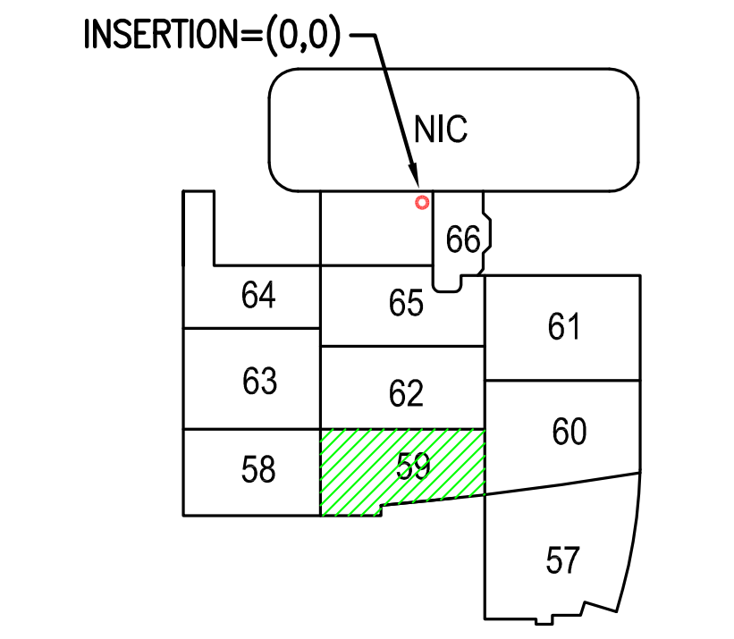


A SECTION VIEW
59 (LOOKING NORTH) SCALE 3/8"=1'-0"



B SECTION VIEW
59 (LOOKING NORTH) SCALE 3/8"=1'-0"

INSERTION=(0,0)



2 KEY PLAN

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE
B, BOTT	BOTTOM
℄	CENTERLINE
D, DN	DOWN
DM	DUCTMATE CONNECTOR
F, FEM	FEMALE
FD	FIRE DAMPER
FI	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	S & DRIVE CONNECTOR
SI	SPIN-IN FITTING
SLV	SLEEVE
SP	STATIC PRESSURE
T	TOP
TDC	TRANSVERSE DUCT CONNECTOR
TH	THROAT
TRANS	TRANSITION FITTING
TV	TURNING VANES
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WITH
WG	WATER GAUGE
┏●	MALE INDICATOR
┏○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
9-30-10	59A	+4"WG. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-5
9-30-10	59B	-2"WG. RETURN AIR DUCTWORK PCS:1-74
9-30-10	59C	+2"WG. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-59
9-30-10	59P	PURCHASED SPIRAL ⌀ DUCTWORK PCS:1P-30P
5-24-11	59AC	AIRCANS PCS: 1-2,3-6
7-13-11	59D	+4"WG. SUPPLY AIR DUCTWORK(CO#134) PCS:1-24
7-13-11	59E	-2"WG. RETURN AIR DUCTWORK(CO#134) PCS:1-17
7-13-11	59F	+2"WG. SUPPLY AIR DUCTWORK(CO#134) PCS:1-44
7-13-11	59P+	+4"WG GALV PCS: 32-35; +2"WG: 36-50; -2"WG: 47-49
10-26-11	59G	+4"WG GALV PCS: G1-G2; +2"WG: G3-G11; -2"WG: G12-G22
12-13-11	59AC-2	AIRCANS PCS: 1-5,6

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	9	AS-BUILT RECORD DRAWING

SHEET METAL CONTRACTORS & FABRICATORS

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: 59

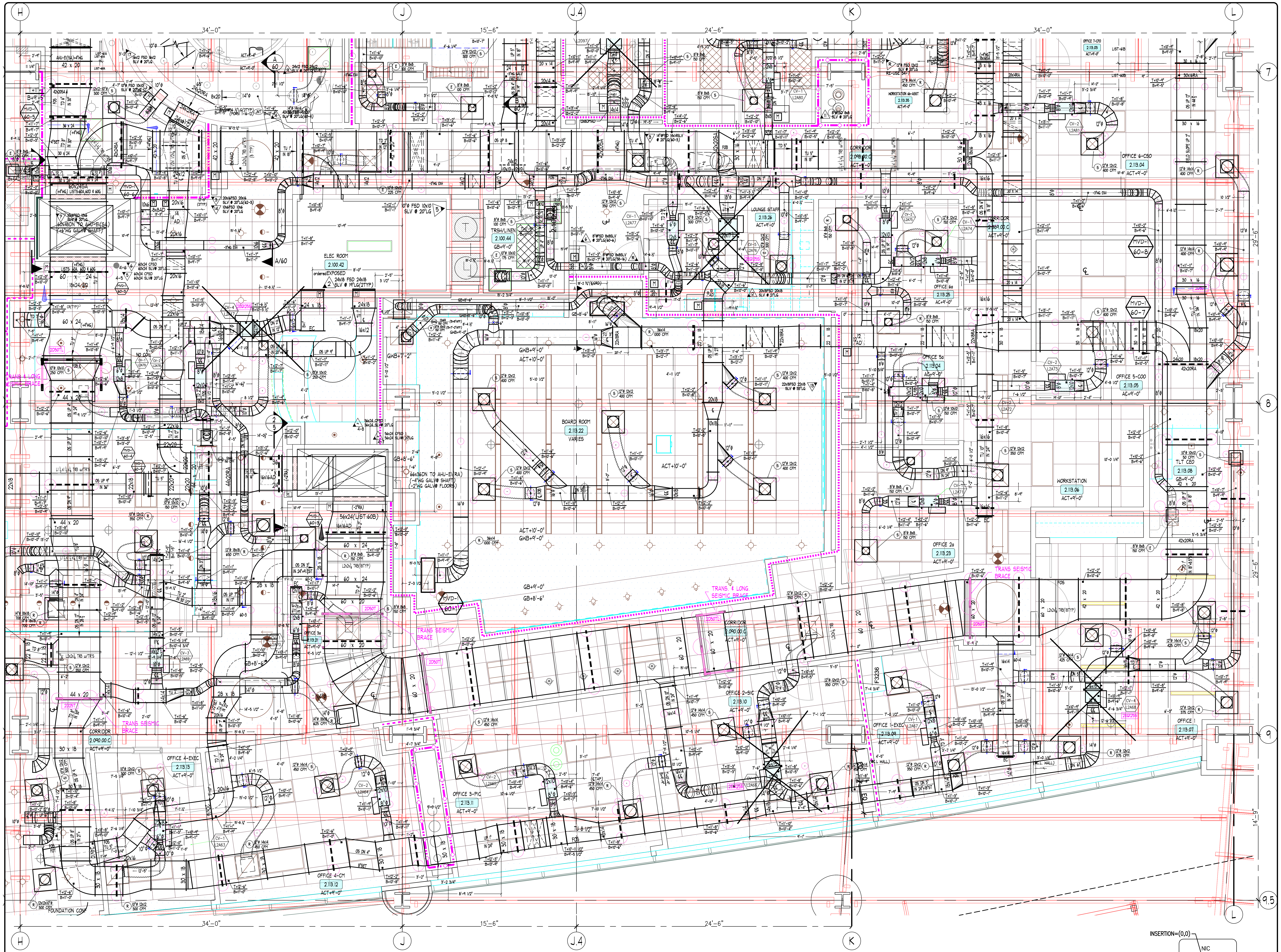
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA E
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.2E STRUCT: S2.3A&B MECH: M3.2E

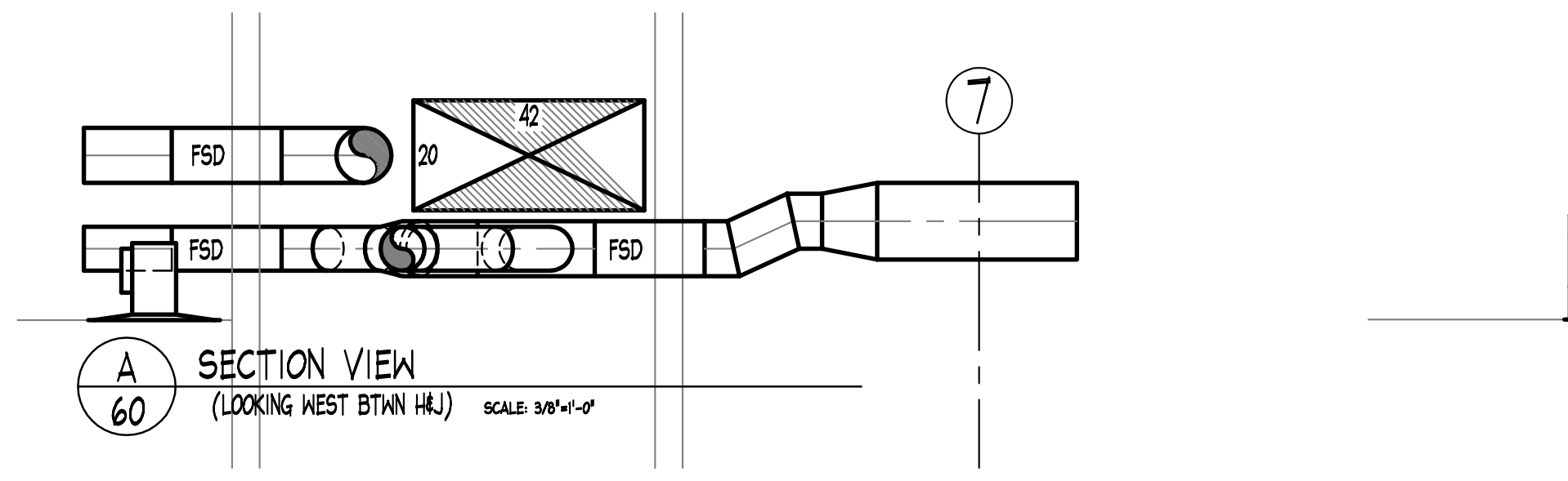
BY: BP
DATE: 1-27-10
SCALE: 3/8"=1'-0"

DRAWING NO.
59 OF 115

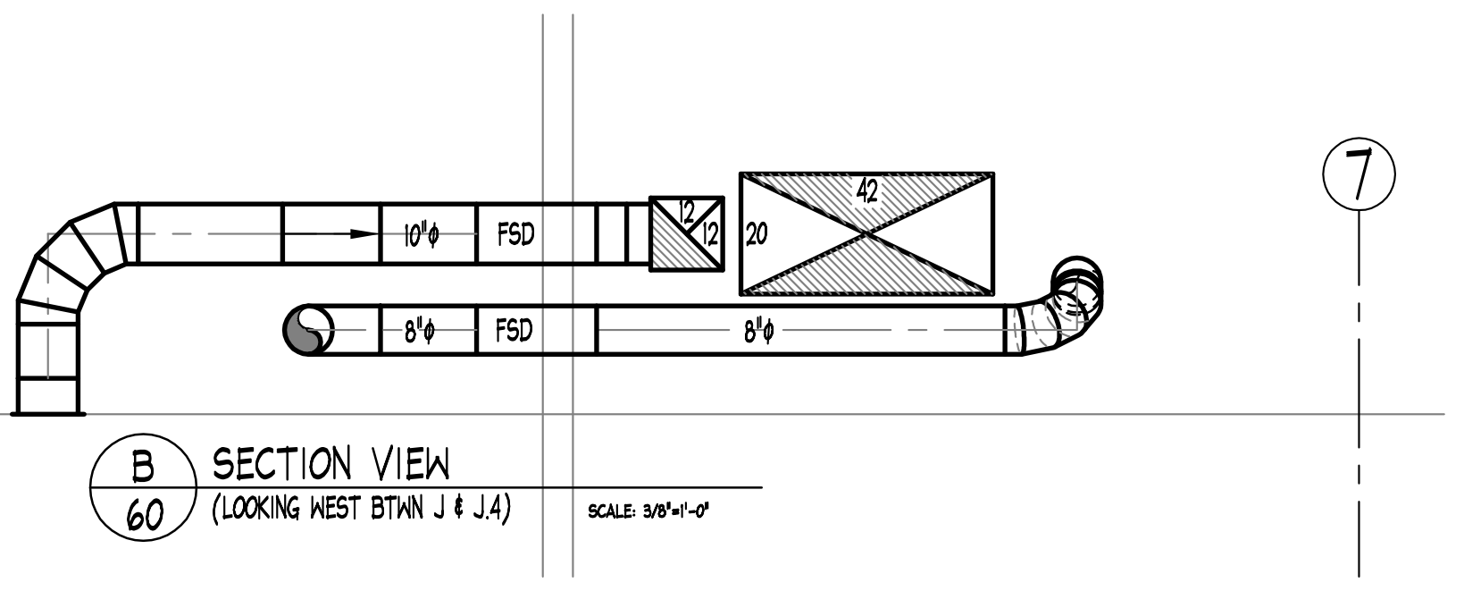


LEVEL TWO - SOUTH EAST

FINISHED FLOOR ELEVATION=35'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

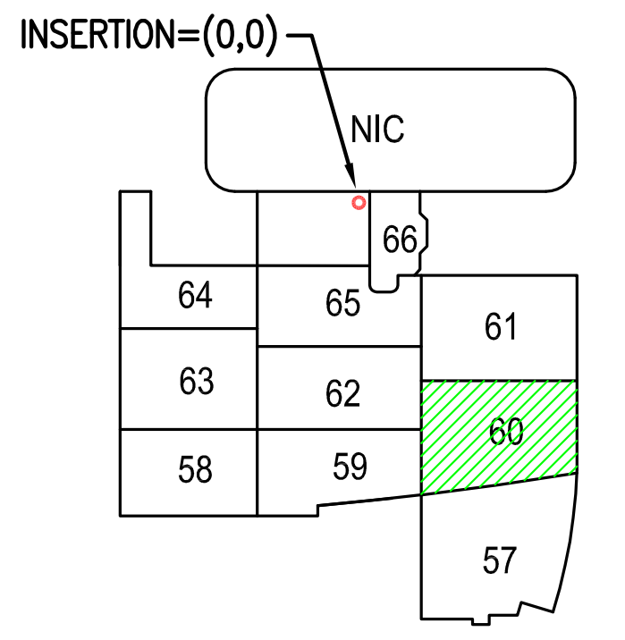


A
60
SECTION VIEW
(LOOKING WEST BTWN H&J) SCALE: 3/8"=1'-0"



B
60
SECTION VIEW
(LOOKING WEST BTWN J & J.4) SCALE: 3/8"=1'-0"

"PROJECT RECORD DRAWING"



N L2 KEY PLAN

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE	S & D	S & DRIVE CONNECTOR
B, BOTT	BOTTOM	SI	SPIN-IN FITTING
℄	CENTERLINE	SLV	SLEEVE
D, DN	DOWN	SP	STATIC PRESSURE
DM	DUCTMATE CONNECTOR	T	TOP
F, FEM	FEMALE	TDC	TRANSVERSE 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
H	HORIZONTAL	W	WITH
M	MALE	WG	WATER GAUGE
OS	OFFSET	┌●	MALE INDICATOR
R	RADIUS	┌○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
⊠	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ / B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
9-10-10	60A	+4"WG. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCE:1-10
9-10-10	60B	-3" & 2" WG. EXHAUST & RETURN AIR DUCTWORK PCE:1-30
9-10-10	60C	+2"WG. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCE:1-17
9-10-10	60P	PURCHASED SPIRAL ϕ DUCTWORK PCE:1P-12P
5-24-11	60AC	AIRCANS PCS: 1-14,15-20
7-28-11	60D	+4"WG. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-113
8-1-11	60E	-3"WG GALV(EXH) PCS: 1-33; -2"WG GALV (RA)PCS: 34-159
7-29-11	60F	+2"WG. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-105
8-1-11	60P+	+4"WG GALV PCS:14-32;+2"WG:33-59; -3"WG:60-66, -2"WG:67-86
10-24-11	60G	+4"WG GALV:1-57;+2"WG:58-91;-2"WG:92-146,167-170,-3"WG:147-166
10-24-11	60P++	+4"WG GALV PCS: 88-90;+2"WG:91-92; -2"WG:93-95
12-12-11	60AC-2	AIRCANS PCS: 1-11,12-25 (CO#134)

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	9	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: 60

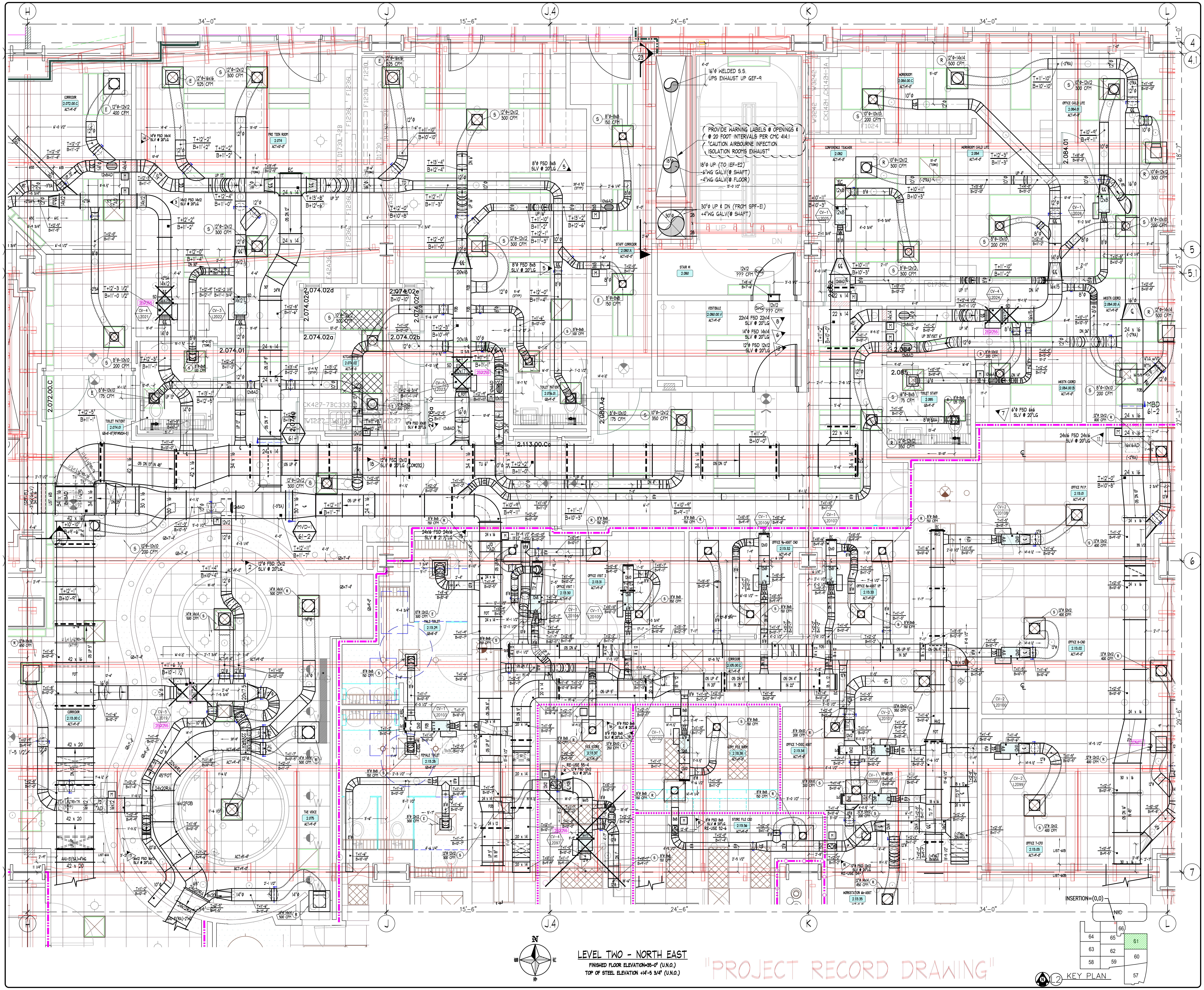
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA F
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.2F STRUCT: S2.3A MECH: M3.2F

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

DRAWING NO.
60 OF 115



LEVEL TWO - NORTH EAST

FINISHED FLOOR ELEVATION=35-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

"PROJECT RECORD DRAWING"

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE
B, BOTT	BOTTOM
℄	CENTERLINE
D, DN	DOWN
DM	DUCTMATE CONNECTOR
F, FEM	FEMALE
FD	FIRE DAMPER
FI	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	S & DRIVE CONNECTOR
SI	SPIN-IN FITTING
SLV	SLEEVE
SP	STATIC PRESSURE
T	TOP
TDC	TRANSVERSE DUCT CONNECTOR
TH	THROAT
TRANS	TRANSITION FITTING
TV	TURNING VANES
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WITH
WG	WATER GAUGE
┣●	MALE INDICATOR
┣○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
9-14-10	61A	+4"WG SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-48
9-14-10	61B	-3" & 2"WG EXHAUST & RETURN AIR DUCTWORK PCS:1-87
9-14-10	61C	+2"WG SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-69
8-9-11	61D	+4"WG SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-26
8-9-11	61E	-3" & 2"WG EXHAUST & RETURN AIR DUCTWORK PCS:1-68
8-9-11	61F	+2"WG SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-45
9-14-10	61P	PURCHASED SPIRAL Ø DUCTWORK PCS:1P-122P, 123-135
5-24-11	61AC	AIRCANS PCS: 1-14, 15-20
10-26-11	61G	+4"WG GALV: 1-16; +2"WG:17-20; -2"WG:21-34; -3"WG:35-37
12-13-11	61AC-2	AIRCANS PCS: 1-8, 9-12(CO#134)
1-16-12	61H	+4"WG GALV: 1-3; +2"WG:14-27; -2"WG:28-51

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	13	AS-BUILT RECORD DRAWING
7-9-12	14	RELOCATED GRILLE PER RFI#5904-0 @ 2.075 THE VOICE

HARRIS & HART
SHEET METAL
CONTRACTORS & FABRICATORS

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: 61

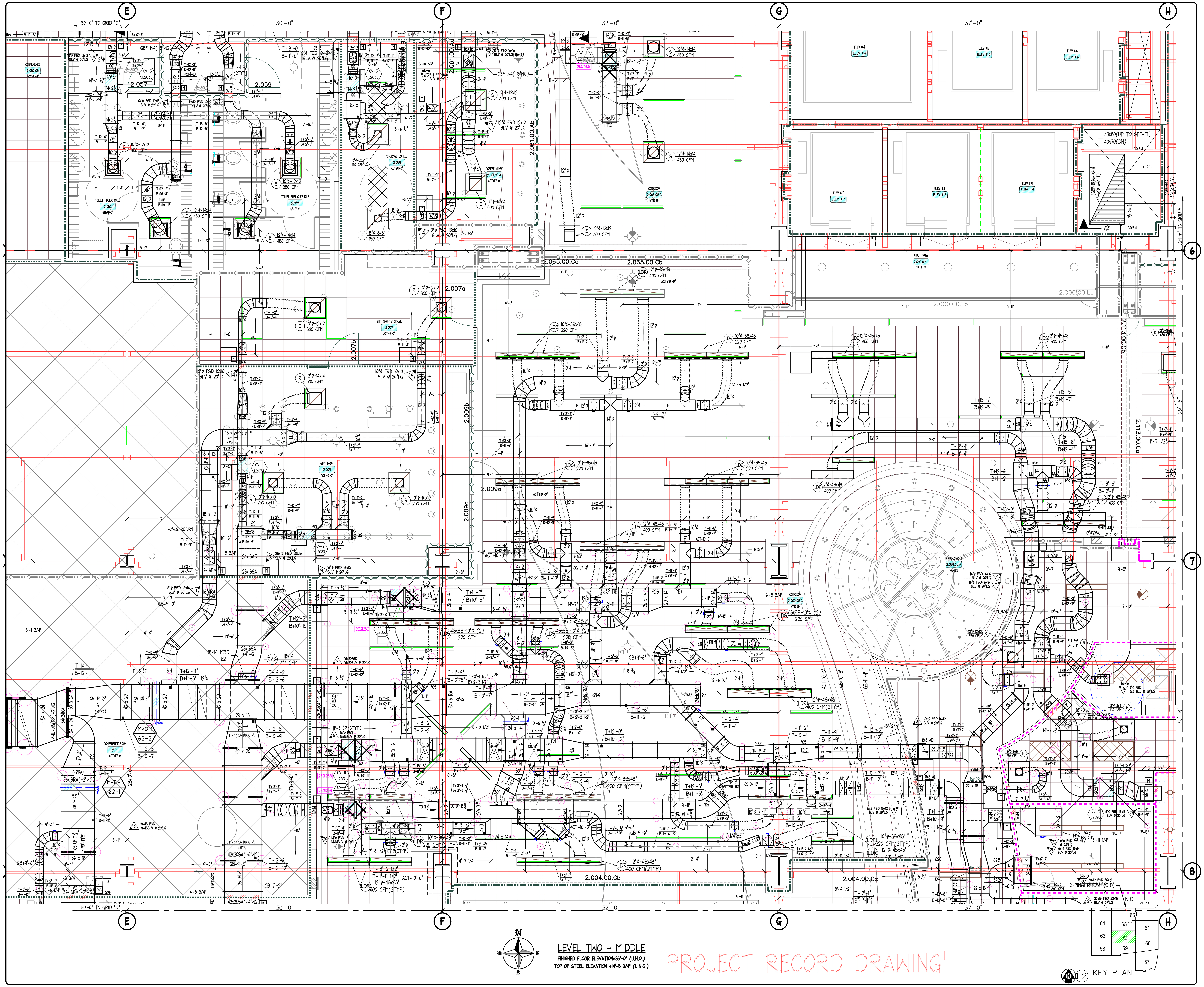
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA G
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.2G STRUCT: S2.3D MECH: M3.2G

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

DRAWING NO.
61 OF 115



LEVEL TWO - MIDDLE
FINISHED FLOOR ELEVATION=35'-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 DUCT BODY. ALLOWANCES MUST BE MADE FOR TRANSVERSE CONNECTORS, REINFORCING AND EXTERIOR INSULATION WHEN COORDINATING ELEVATIONS.

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE	S & D	S & DRIVE CONNECTOR
B, BOTT	BOTTOM	SI	SPIN-IN FITTING
℄	CENTERLINE	SLV	SLEEVE
D, DN	DOWN	SP	STATIC PRESSURE
DM	DUCTMATE CONNECTOR	T	TOP
F, FEM	FEMALE	TDC	TRANSVERSE 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
H	HORIZONTAL	W	WITH
M	MALE	WG	WATER GAUGE
OS	OFFSET	┌●	MALE INDICATOR
R	RADIUS	┌○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
⊠	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ / B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
10-4-10	62A	+4"WG. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-11
10-4-10	62B	-3"& 2"WG. EXHAUST & RETURN AIR DUCTWORK PCS:1-78
10-4-10	62C	+2"WG. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-81
10-4-10	62P	PURCHASED SPIRAL ϕ DUCTWORK PCS:1P-54P
5-24-11	62AC	AIRCANS PCS: 1-7,8-11
8-1-11	62D	+4"WG. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-13
8-1-11	62E	2"WG. RETURN AIR DUCTWORK PCS:1-45
8-1-11	62F	+2"WG. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-24
10-27-11	62G	+4"WG GALV: G1-G2; +2"WG:G3-G29,G64; -2"WG:G30-G63
10-27-11	+62P	+2"WG GALV: 55P-56P; -2"WG:57P-58P
12-13-11	62AC-2	AIRCANS PCS: 1-3

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	10	AS-BUILT RECORD DRAWING

SHEET METAL CONTRACTORS & FABRICATORS
HARRIS & HART

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: 62

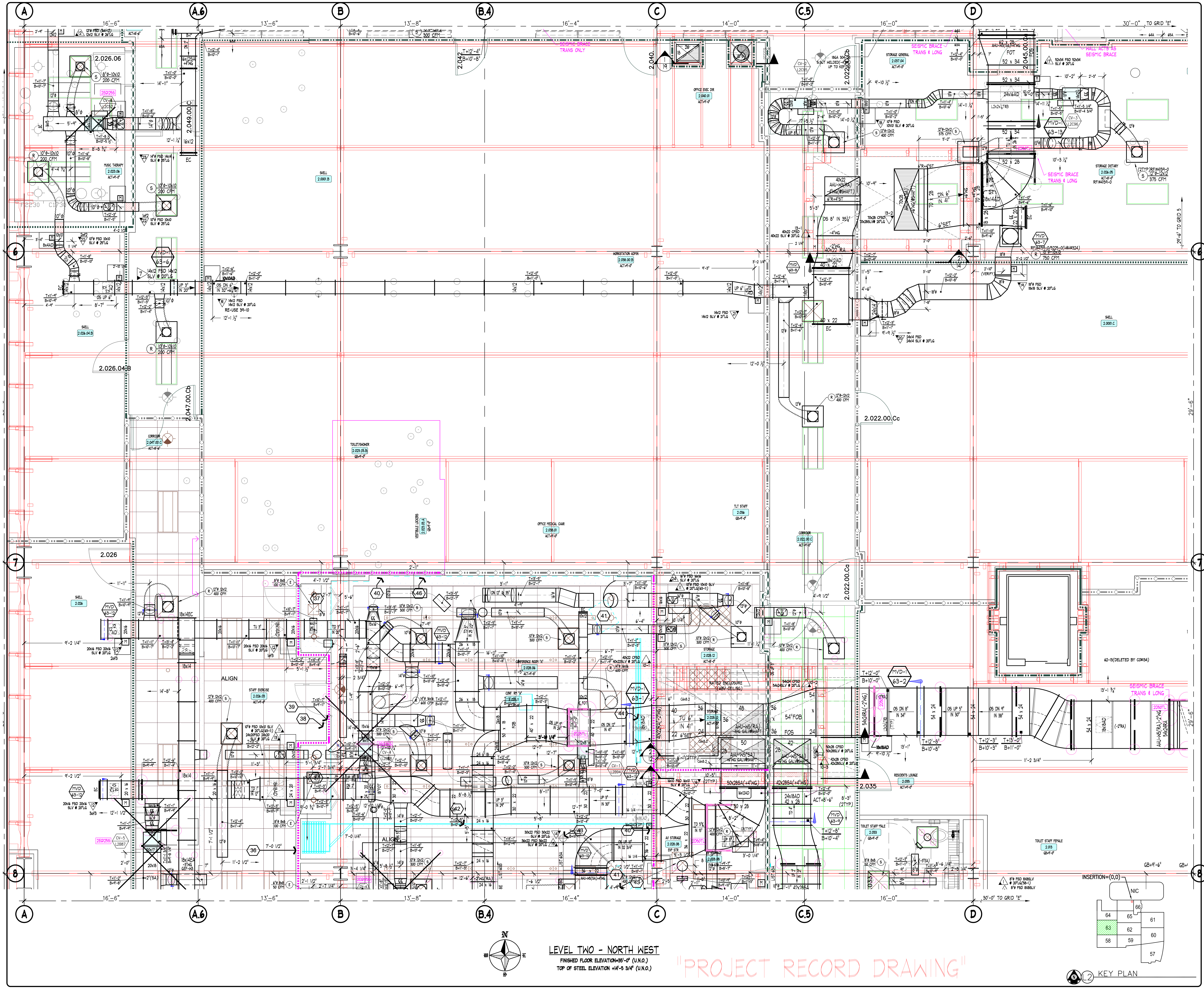
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA H
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.2H STRUCT: S2.3ABCD MECH: M3.2H

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

DRAWING NO.
62 OF 115



LEVEL TWO - NORTH WEST

FINISHED FLOOR ELEVATION=35'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

"PROJECT RECORD DRAWING"

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE	S & D	S & DRIVE CONNECTOR
B, BOTT	BOTTOM	SI	SPIN-IN FITTING
℄	CENTERLINE	SLV	SLEEVE
D, DN	DOWN	SP	STATIC PRESSURE
DM	DUCTMATE CONNECTOR	T	TOP
F, FEM	FEMALE	TDC	TRANSVERSE 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
H	HORIZONTAL	W	WITH
M	MALE	WG	WATER GAUGE
OS	OFFSET	⊸●	MALE INDICATOR
R	RADIUS	⊸○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ / B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
8-2-11	63A	+4"WG GALV PCS: 1-62
8-3-11	63B	-3"WG GALV(EXH)PCS: 1-19; -2"WG (RA)PCS: 20-88
8-2-11	63C	+2"WG GALV PCS: 1-32
8-2-11	63P	+4"WG PCS:1-7; +2"WG:8-24; -3"WG:25-30; -2"WG:31-39
5-24-11	63AC	AIRCANS PCS: 1-3
10-27-11	63D	+4"WG GALV:1-5; +2"WG:6-8; -2"WG:9-16; -3"WG:17-19
12-13-11	63AC-2	AIRCANS PCS: 1-7, 8-11

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	6	AS-BUILT RECORD DRAWING
8-6-12	7	ADDED SEISMIC (NCN-12 PART 2) AS-BUILT RECORD DRAWING

SHEET METAL
CONTRACTORS & FABRICATORS

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: 63

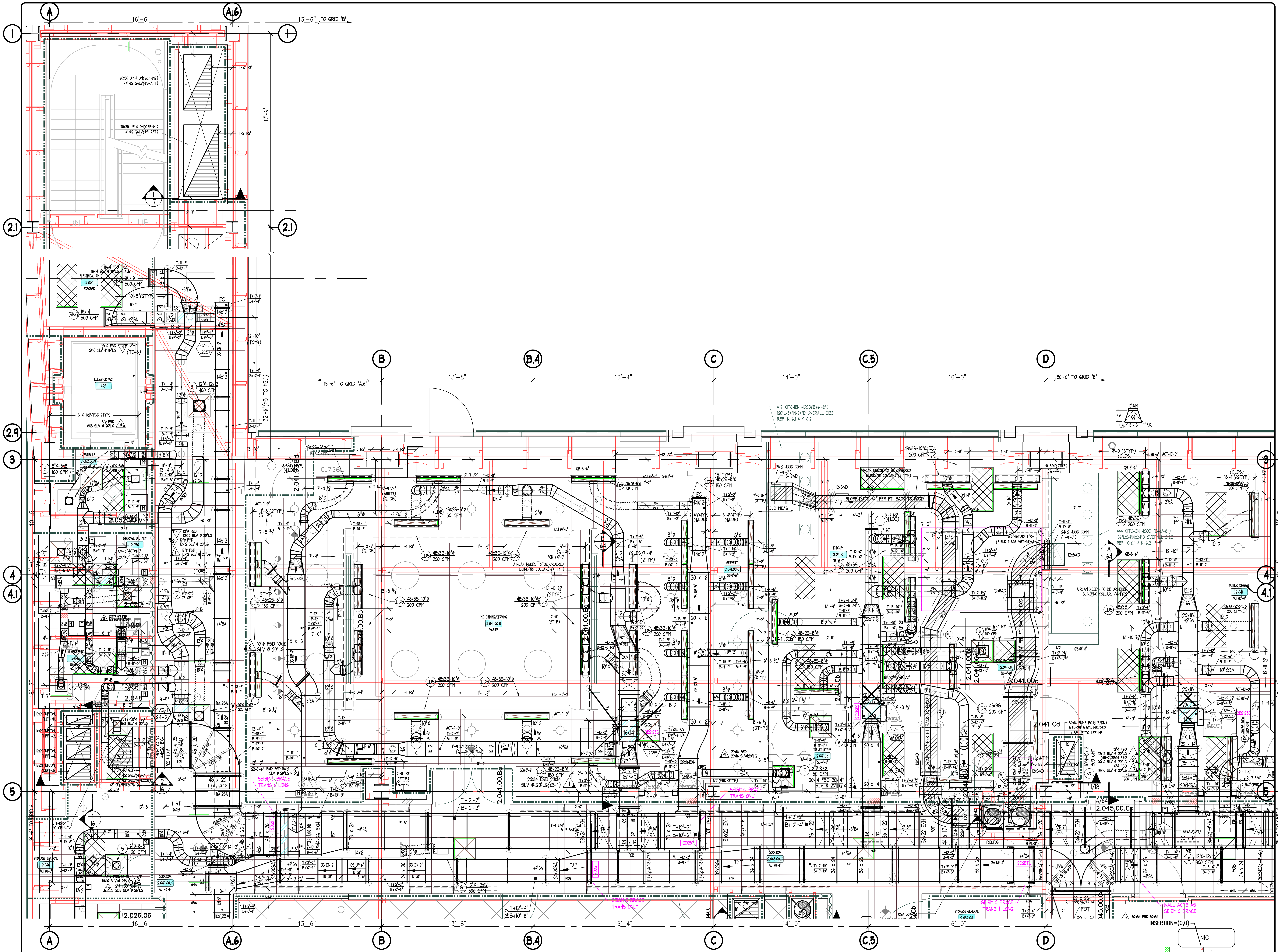
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA J
HVAC SYTEM LAYOUT

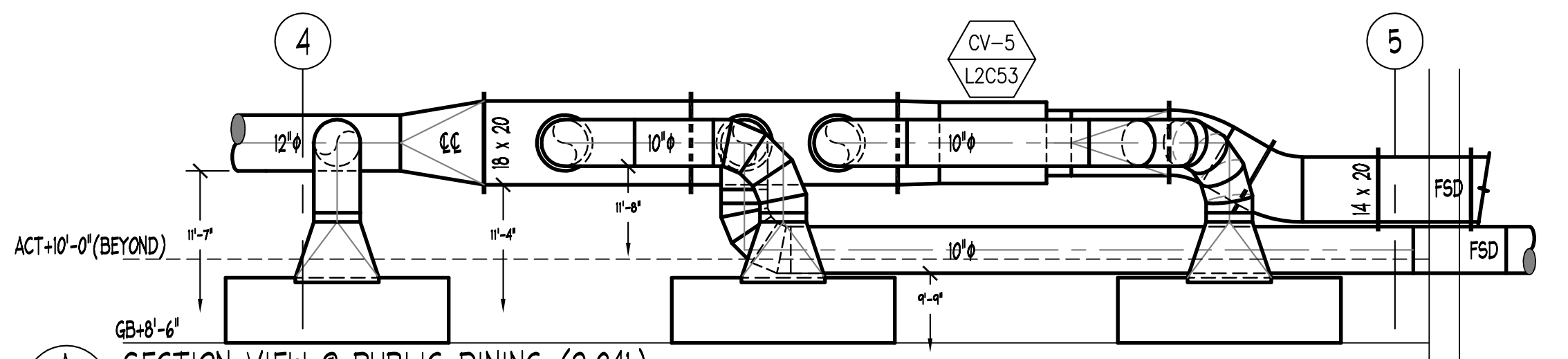
REFERENCE DRAWINGS
ARCH:A3.2J STRUCT: S2.3B&C MECH: M3.2J

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

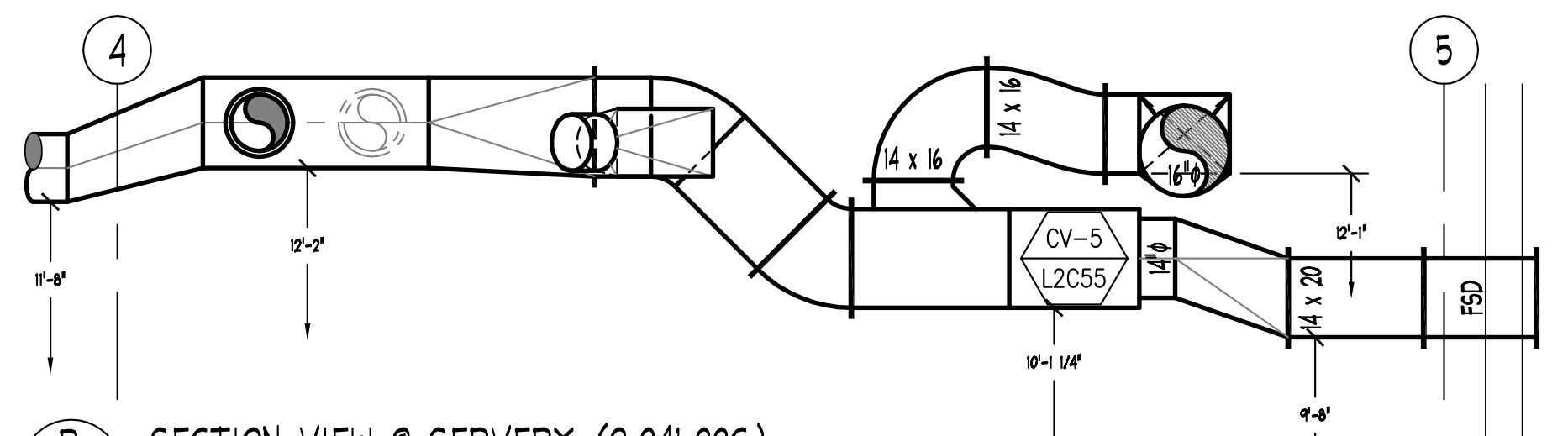
DRAWING NO.
63 OF 115



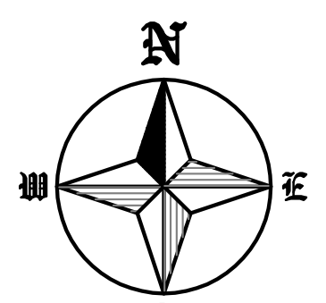
A
64
SECTION VIEW @ PUBLIC DINING (2.041)
(LOOKING EAST)
SCALE: 3/8"=1'-0"



B
64
SECTION VIEW @ SERVERY (2.041.00C)
(LOOKING EAST)
SCALE: 3/8"=1'-0"

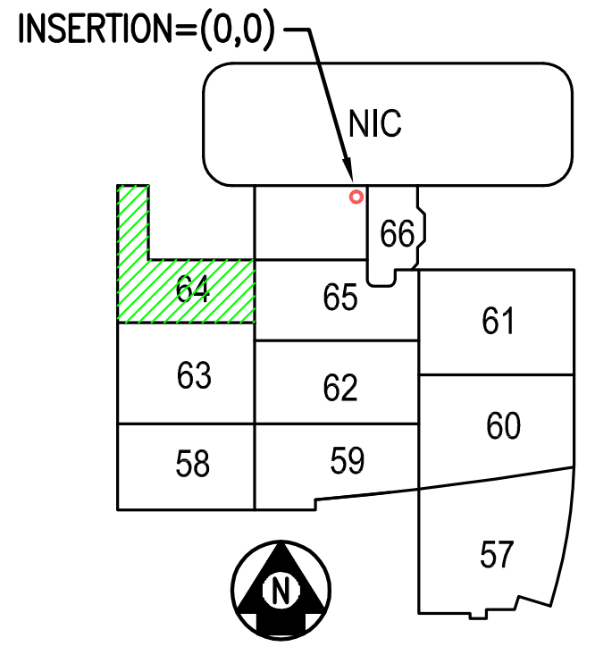


"PROJECT RECORD DRAWING"



LEVEL TWO - NORTH WEST

FINISHED FLOOR ELEVATION=35'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)



L2 KEY PLAN

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE
B, BOTT	BOTTOM
℄	CENTERLINE
D, DN	DOWN
DM	DUCTMATE CONNECTOR
F, FEM	FEMALE
FD	FIRE DAMPER
FI	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	S & DRIVE CONNECTOR
SI	SPIN–IN FITTING
SLV	SLEEVE
SP	STATIC PRESSURE
T	TOP
TDC	TRANSVERSE DUCT CONNECTOR
TH	THROAT
TRANS	TRANSITION FITTING
TV	TURNING VANES
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WITH
WG	WATER GAUGE
┌●	MALE INDICATOR
┌○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
9-17-10	64A	+4"W.G. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-44
9-17-10	64B	-3"W.G. EXHAUST AIR DUCTWORK PCS:1-80
9-17-10	64C	+2"W.G. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-96
9-17-10	64D	-4"W.G. KITCHEN EXHAUST PCS:1-8
8-3-11	64E	+2"WG GALV SA PCS: 1-13
9-17-10	64P	PURCHASED SPIRAL Φ DUCTWORK PCS:1P-53P
5-24-11	64AC	AIRCANS PCS: 1-7,8-10

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	11	AS-BUILT RECORD DRAWING

SHEET METAL CONTRACTORS & FABRICATORS

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

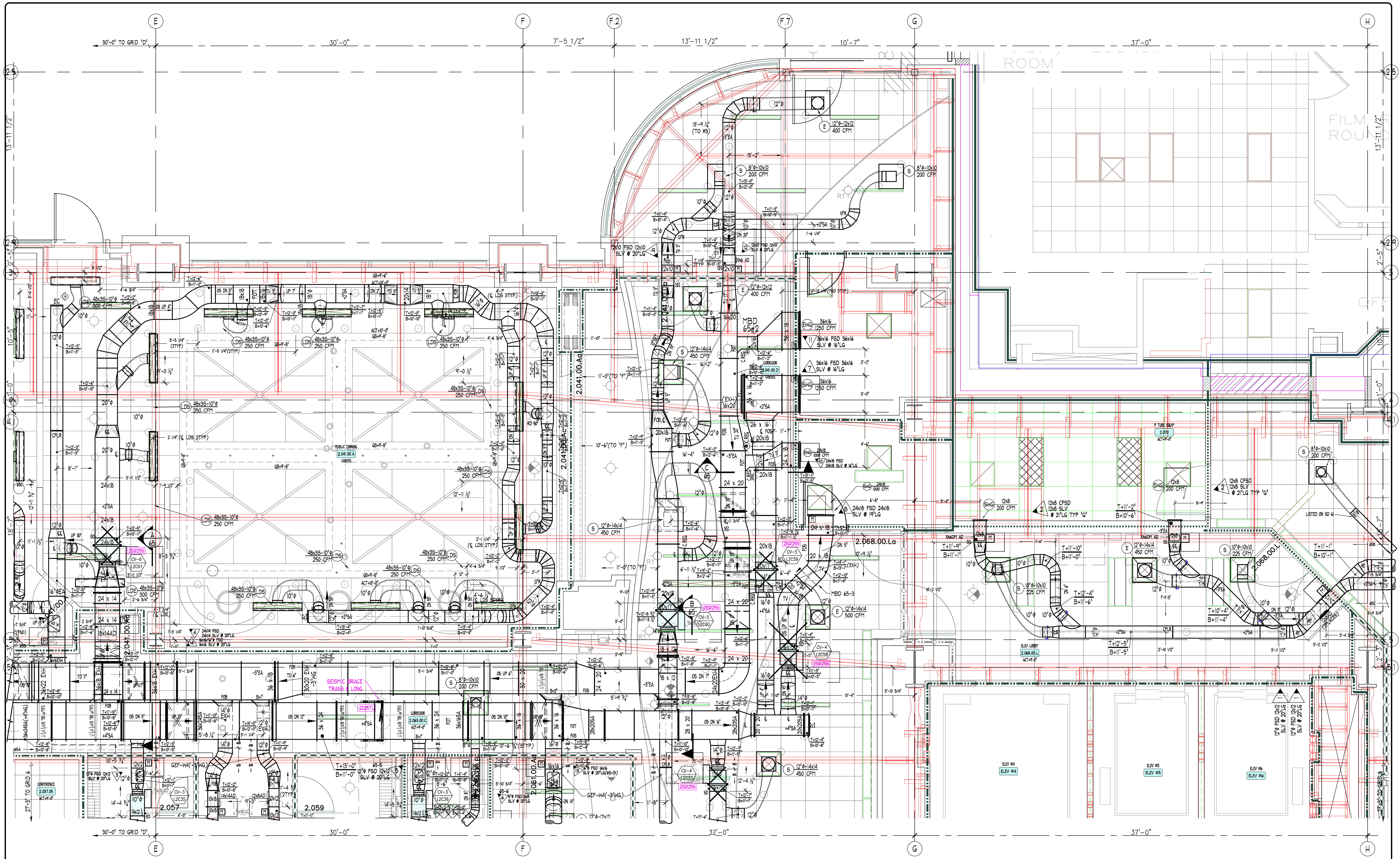
JOB NO: 9507 PAY ITEM: 64

PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA K
HVAC SYSTEM LAYOUT

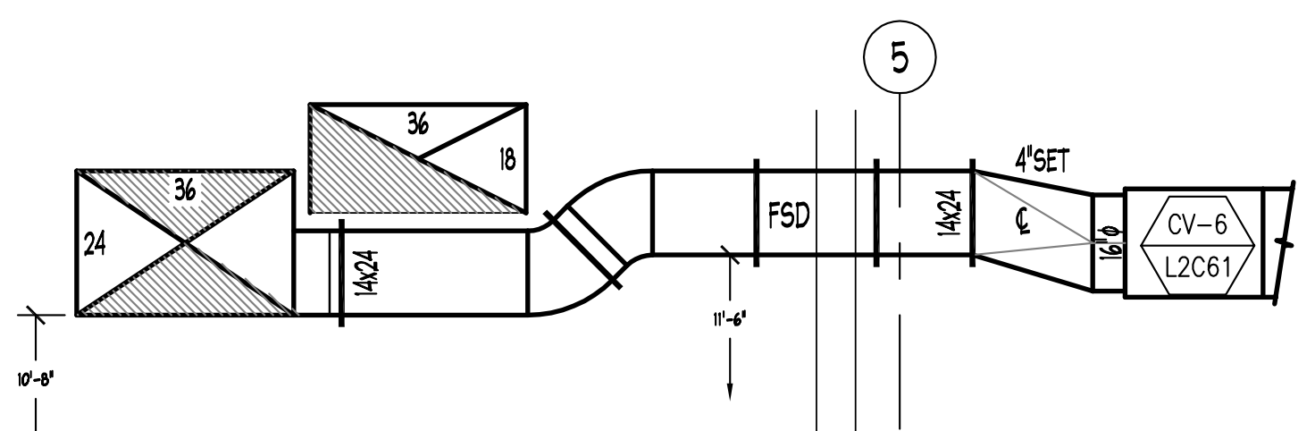
REFERENCE DRAWINGS
ARCH:A3.2K STRUCT: S2.3C MECH: M3.2K

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

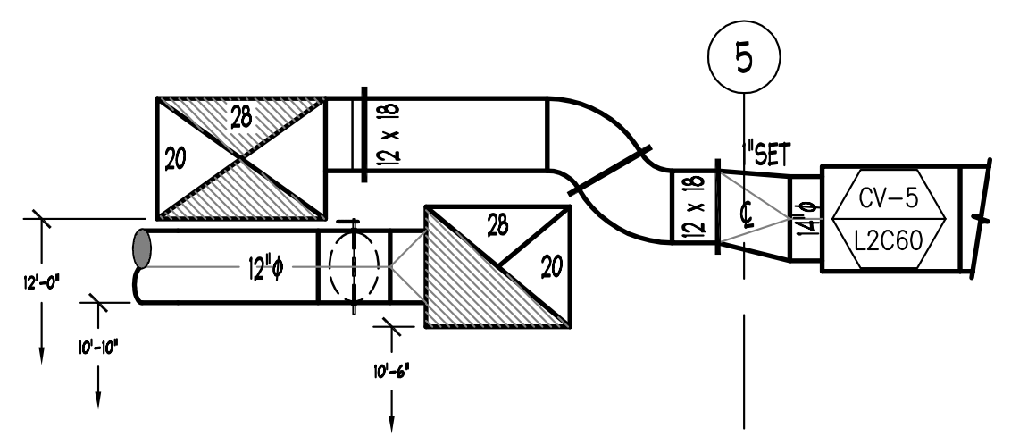


LEVEL TWO - NORTH CENTRAL

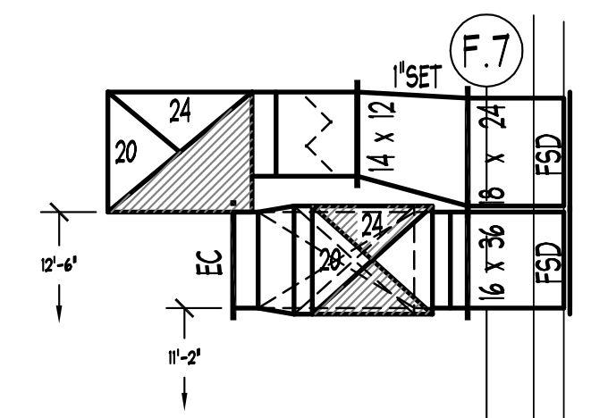
FINISHED FLOOR ELEVATION=35'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)



A/65 SECTION VIEW (LOOKING WEST) SCALE: 3/8"=1'-0"



B/65 SECTION VIEW (LOOKING WEST) SCALE: 3/8"=1'-0"



C/65 SECTION VIEW (LOOKING NORTH) SCALE: 3/8"=1'-0"

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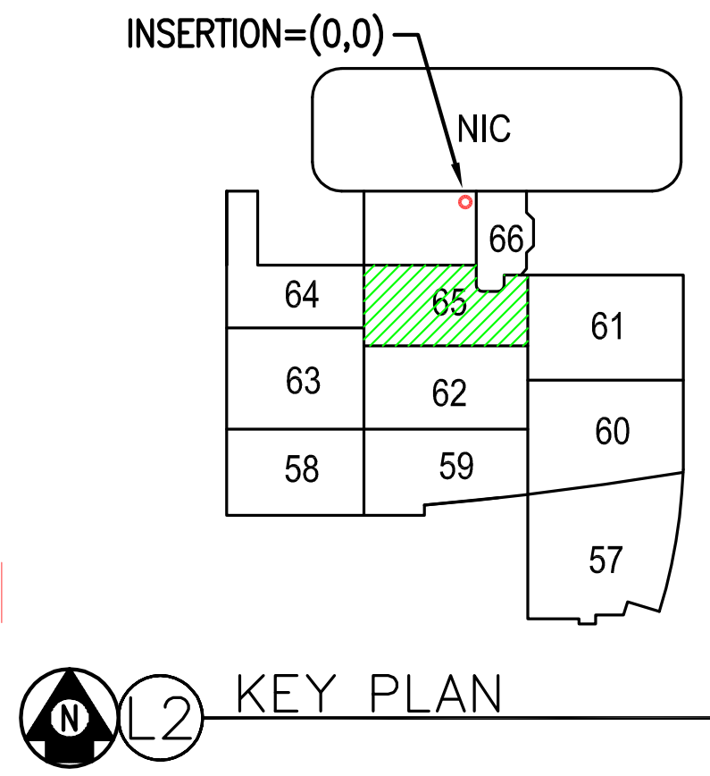


L2 KEY PLAN

"PROJECT RECORD DRAWING"

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE
B, BOTT	BOTTOM
℄	CENTERLINE
D, DN	DOWN
DM	DUCTMATE CONNECTOR
F, FEM	FEMALE
FD	FIRE DAMPER
FI	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	S & DRIVE CONNECTOR
SI	SPIN-IN FITTING
SLV	SLEEVE
SP	STATIC PRESSURE
T	TOP
TDC	TRANSVERSE DUCT CONNECTOR
TH	THROAT
TRANS	TRANSITION FITTING
TV	TURNING VANES
U	UP
V	VERTICAL
VD	VOLUME DAMPER
W	WITH
WG	WATER GAUGE
┌●	MALE INDICATOR
┌○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ / B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION
9-23-10	65A	+4"W.G. SUPPLY AIR DUCTWORK UPSTREAM OF BOXES PCS:1-31
9-23-10	65B	-3"W.G. EXHAUST AIR DUCTWORK PCS:1-47
9-23-10	65C	+2"W.G. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-57
9-23-10	65P	PURCHASED SPIRAL ϕ DUCTWORK PCS:1P-31P
3-4-11	65D	PURCHASED SPIRAL ϕ DUCTWORK PCS:1-37
3-4-11	65P-ADD	PURCHASED SPIRAL ϕ DUCTWORK PCS:32P-44P
5-24-11	65AC	AIRCANS PCS: 1-5,6-9
8-4-11	65E	+2"W.G. SUPPLY AIR DUCTWORK DNSTREAM OF BOXES PCS:1-8

REVISIONS

DATE	NO.	DESCRIPTION
5-7-12	9	AS-BUILT RECORD DRAWING

SHEET METAL CONTRACTORS & FABRICATORS
HARRIS & HART

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: 65

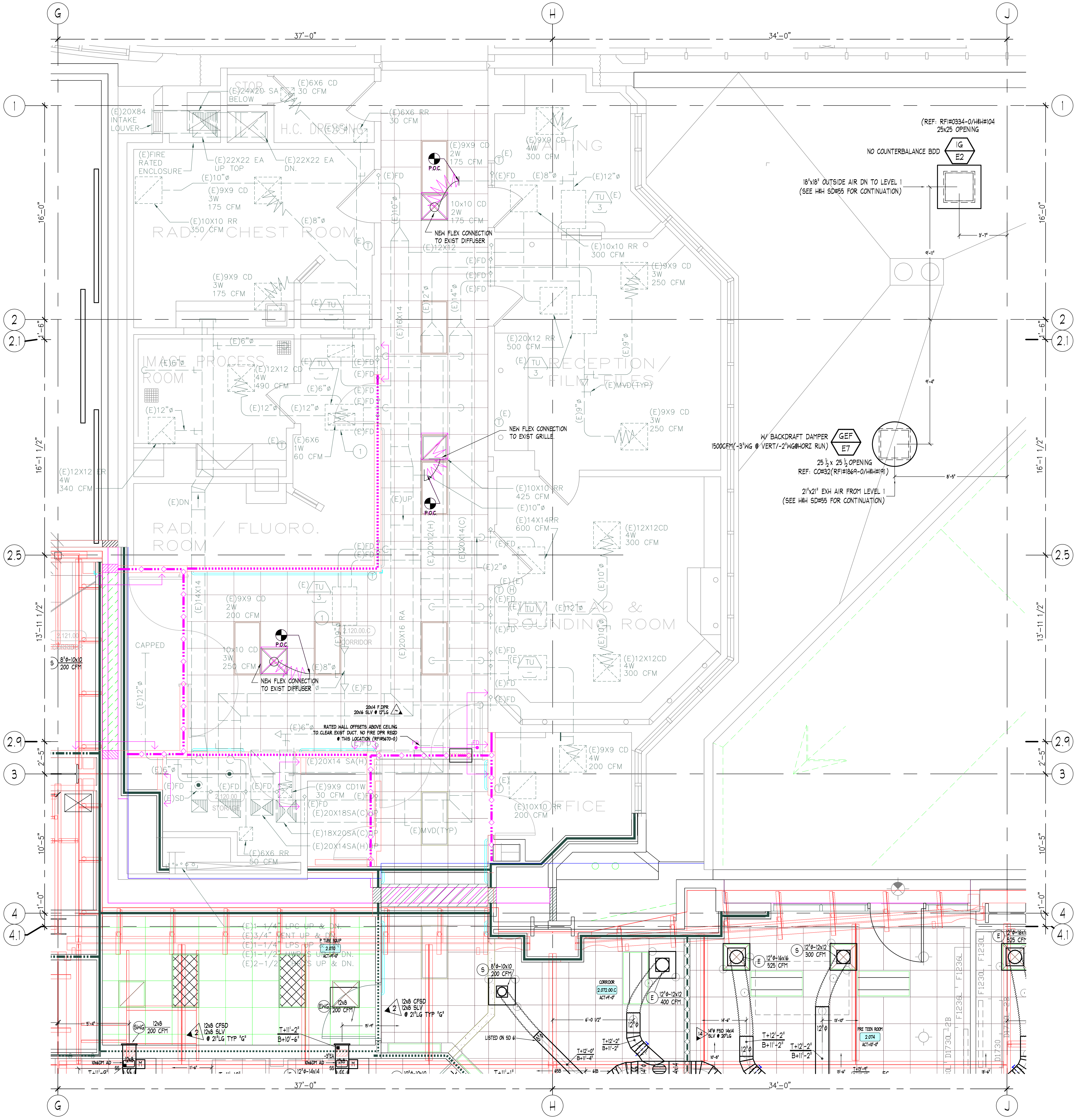
PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA L
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.2L STRUCT: S2.3C&D MECH: M3.2L

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

DRAWING NO.
65 OF 115

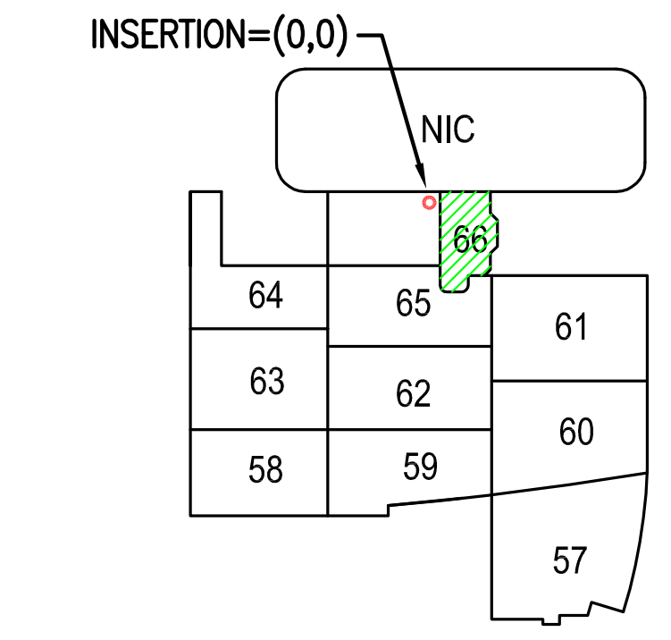


LEVEL TWO - NORTH EAST

FINISHED FLOOR ELEVATION=35'-0" (U.N.O.)
TOP OF STEEL ELEVATION +14'-5 3/4" (U.N.O.)

"PROJECT RECORD DRAWING"

INSERTION=(0,0)



L2 KEY PLAN

NOTES

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

ABBREVIATIONS

AD, AP	ACCESS DOOR. ACCESS PLATE	S & D	S & DRIVE CONNECTOR
B, BOTT	BOTTOM	SI	SPIN-IN FITTING
℄	CENTERLINE	SLV	SLEEVE
D, DN	DOWN	SP	STATIC PRESSURE
DM	DUCTMATE CONNECTOR	T	TOP
F, FEM	FEMALE	TDC	TRANSVERSE 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
H	HORIZONTAL	W	WITH
M	MALE	WG	WATER GAUGE
OS	OFFSET	┌●	MALE INDICATOR
R	RADIUS	┌○	FEMALE INDICATOR

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
M	MOTORIZED DAMPER
	DUCTWORK ACCESS DOOR OR ACCESS PLATE
○	DUCTWORK PIECE NO. INDICATOR
T+ B+	TOP OF DUCT/BOTTOM OF DUCT ELEVATION INDICATOR

MATERIAL LISTS

DATE	NO.	DESCRIPTION

REVISIONS

DATE	NO.	DESCRIPTION
11-12-10	1	UPDATED FOR INSTALLATION (CO#32-RFI#1869-0/H&H#191 & 104)
6-1-12	2	AS-BUILT RECORD DRAWING W/ANNEX CHANGES (CO#135)

SHEET METAL CONTRACTORS & FABRICATORS
HARRIS & HART

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

PHONE: (801) 731-0577
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WEBSITE: WWW.HARRIS-HART.COM

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

JOB NO: 9507
PAY ITEM: 66

PROJECT:
CHILDRENS HOSPITAL
ORANGE, CA

TITLE:
LEVEL TWO AREA P
HVAC SYSTEM LAYOUT

REFERENCE DRAWINGS
ARCH:A3.21 STRUCT: EXIST MECH: M3.2P

BY: K. BARLOW
DATE: 6-1-12
SCALE: 3/8"=1'-0"

DRAWING NO.
66 OF 115