CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0114283
Insp Area: 4
Thos Bros: 277 A6

Site Address: 2379 GATEWAY OAKS DR SAC
Parcel No: 274-0320-097 THE ENTIRE BUILDING

Sub-Type: TI
Housing (Y/N): N

CONTRACTOR
HMH BUILDERS INC
8589 THYS CT
SAC 95828

OWNER
KKN INC
3610 AMERICAN RIVER DR
SACRAMENTO CA 95864

ARCHITECT
NIELSEN & ASSOCIATES
550 HOWE AVE
SACRAMENTO CA 95825

Nature of Work: FIRST TIME TENANT IMPROVEMENT FOR THE ENTIRE BUILDING

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender'sAddress _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class A-B-C8 License Number 780999 Date 1-2-02 Contractor Signature Mark H Hutton

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars ($500.00);

_____ I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

_____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

_____ I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and herby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 1-2-02 Applicant/Agent Signature Mark Hutton

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

_____ I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

→ X I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier INS CO OF TH STATE OF PA Policy Number 7083206/07 Exp Date 08/01/2003

_____ (This section need not be completed if the permit is for $100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 1-2-02 Applicant Signature Mark Hutton

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS ($100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

CITY OF SACRAMENTO

30 DAY TEMPORARY
Certificate of Occupancy

For Information Contact (916) 264-5716

Building Address: 2379 GATEWAY OAKS DR #100 & 200 Permit No. 0114283

Building Use: OFFICE Occupancy: B

Building Owner: KKN, INC. Construction Type: II-N

Owner Address: 3610 AMERICAN RIVER DR SAC. CA. Sprinkled? [X] Yes [ ] No

Portion of Building Occupied: ENTIRE BUILDING Area: 53619 Sq. Ft.

Specific purpose for temporary occupancy and/or conditions/limitations of temporary occupancy:

05/22/02 **DENNIS RICHARDSON** Date

By:Print Sign CITY BUILDING OFFICIAL

[TCO approvals::GD,MB,JB]

BC 109.4 TEMPORARY CERTIFICATE

If the Chief Building Official finds that no substantial hazard will result from occupancy of any building or portion thereof before the same is completed, a temporary Certificate of Occupancy may be issued for the use of a portion or portions of a building or structure prior to the completion for the entire building or structure.

POST IN A CONSPICUOUS PLACE

CITY OF SACRAMENTO

CERTIFICATE OF OCCUPANCY

For Information Contact (916) 264-5716

Building Address: 2379 GATEWAY OAKS DR #100 & #200 Permit No. 0114283

Building Use: OFFICE SPACE Occupancy: B

Building Owner: KKN, INCORPORATED Construction Type: II-N

Owner Address: 3610 AMERICAN RIVER DR Sprinkled? [X] Yes [ ] No

Portion of Building Occupied: SUITE 100 & 200 Area: 53,619 Sq. Ft.

7/3/02 DENNIS RICHARDSON

Date By:Print Sign CITY BUILDING OFFICIAL

[Finaled By: GTD,MJB,JZB,CP]

This Certificate, issued pursuant to the requirements of Section 109 of the Uniform Building Code, certifies that at time of issuance the described portion of the building has been inspected for compliance with the Uniform Building Code, as adopted per Title 15 of the Sacramento City Code for the group and division of occupancy and use for which the proposed occupancy is classified. Issuance of this certificate shall not be construed as an approval of a violation of any Codes, or Federal, State and City Laws or Ordinances. Certificates presuming to give authority to such violation shall not be valid. This certificate shall be posted in a conspicuous place on the premises and shall not be removed except by the City Building Official. No changes shall be made in the character of occupancy or use without approval of the City Building Official.

POST IN A CONSPICUOUS PLACE

APPLICATION FOR COMMERCIAL BUILDING PERMIT

CITY OF SACRAMENTO
DEVELOPMENT SERVICES DIVISION
PERMIT SERVICES SECTION
1231 I Street, Rm. 200
Sacramento, CA 95814 (916) 264-7619 FAX 264-7046

ACTIVITY # 0114283 Insp. Area 4C

Applicant MUST complete ALL Unshaded areas

ADDRESS 2379 Gateway Oaks Drive Suite 100, 200
PARCEL # 274-0320-097

CONTACT
Name Richard Nielsen
Street Address 550 Howe Avenue
City/State/Zip Sacramento, CA 95825
Phone 925-0333 FAX 925-8608
E-mail: rmbnielsen@aol.com

LICENSED CONTRACTOR Lic No. #
Name HMH
Address 8589 Thys Ct.
City/State/Zip Sacto, CA 95828
Phone 383-4825 FAX 388-9195
E-mail:

ARCHITECT/ENGINEER
Name Nielsen & Associates Architects
Address 550 Howe Avenue
City/State/Zip Sacto, CA 95825
Phone 925-0333 FAX 925-8608
E-mail: rmbnielsen@aol.com

OWNER
Name KKN, INC.
Address 3610 American River Dr.
City/State/Zip Sacto, CA 95864
Phone 978-4890 FAX 978-4950
E-mail:

→ Will permittee have any employees on the jobsite? ☐ No ☒ Yes → INSURANCE CO:

→ WORKER'S COMPENSATION POLICY # EXPIRATION DATE:

NATURE OF WORK IN DETAIL: Office Tenant Improvement

OCCUPANT/TENANT: Henwood Energy Services VALUATION: $

FLOOD STATUS: S.C.A.T. 200

JOB DESCRIPTION: BLDG SHELL APT TI REM( ) SW FIRE ADD OTH

INSPECTION DISCIPLINES: BLDG MECH PLUMB ELEC SITE FIRE

# Stories	1st flr Area.	Total Area	Use Zone	Occp Group	Const type	Fire Req. Y / N SPR	Fire Req. Y / N ALARM	Fed Code	Vio. File [H]	Vio. File [Quad]
2	26197	53619		B	II-N			15		

B	L	P	M	E	F	S	D	PW	UTIL

COMMENTS:

REGIONAL SANITATION FEES? ☐ Yes ☒ No HEALTH DEPARTMENT? ☐ Yes ☒ No

WATER FLOW TEST FOR NEW BUILDINGS OR ADDITIONS? ☐ Provided ☐ Faxed

SYSTEMS • TECH
FIRE PROTECTION
5037 COLLEGE OAK DR. SUITE H, SACRAMENTO, CALIF. 95841 (916) 332-1266

10-11-01

Sacramento City Building
1231 I St. 200#
Sacramento, Calif.

Attn: BJ Foster
RE: Henwood (Natomas Ph.3)

Dear BJ,

We recently had a conversation over counter, regarding the submittal process for the above noted project. It was my concern, that I could not have drawings for the shell generated in time, to meet the submittal schedule for the Henwood tenant improvement for this building.

You had given us the option of a deferred submittal for the tenant improvement, due to the size of the project, 100%+\- of which shall be the Henwood project. I was instructed to have the Architect contact you directly for this submittal process, with Fire Sprinkler drawings to follow within the next 3 weeks.

Nielsen & Assoc. will be the architect that is handling this submittal. If you should have any questions, or need me to meet you at the counter, I would be happy to do so.

Sincerely,

Hal Burton
Project Engineer

PSOMAS

Information and Engineering Solutions

April 8, 2002

Mr. Steve Twelves
HARBISON MAHONY HIGGINS, INC.
8589 Thys Court
Sacramento, CA 95828

Subject: Natomas/West Investors, Phase 2, Building C (6LPA013100)

Dear Steve,

We are writing in response to the issue regarding the 5-inch roof drain that was connected to a 4-inch roof drain lateral. We have contacted the mechanical engineer and were told that each of the 5-inch laterals must drain 6095 square feet of roof. The downspouts are sized based on 3 inches per hour rain intensity. This is very conservative for the area. Based on this intensity and the area we have determined that the design flow from the roof would be 0.42 cubic feet per second.

It is our understanding that the 4-inch roof drains laterals were installed at roughly 5.6% grade. This assumes a straight grade from the point of connection at the building to the storm drain main in the parking lot. The laterals are 36 feet long. The 4-inch lateral pipe has a capacity of 0.52 cfs at that slope. If a portion of the lateral were installed at 2% grade it would not have a significant affect of the hydraulics for the short distance to the main.

It is our opinion that the 4-inch roof drain lateral installed is adequate and should not be a maintenance issue in the future.

Sincerely,

PSOMAS

Alan Rozier
Project Engineer

AR:pah

REGISTERED PROFESSIONAL ENGINEER
ALAN M. ROZIER
C044927
EXP 3-31-02
CIVIL
STATE OF CALIFORNIA

JOB: 6167

ROUTE	INFO	ACT
STEVE T		
SHAWN B		
JODI		
PROJ ENG		
JIM	X	
JESSE	X	

Site Plan Bowes

SUBCONTRACTOR DISTR
☐ ACTION
☐ INFO

5 Sierra Gate Plaza
Suite 150
Roseville, CA 95678

916.788.8122
916.788.0900 Fax
www.psomas.com

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Microfilm

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME: Brad Chessshire

PROJECT: Hexwood

JOB#: 1620.10

SYSTEM:

DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	Q Min	Q Max	H Max	Q Min	Q Max	H Max	Q Min	Q Max	
VAV 1-1	1	SH	12			470			470			465	
	2	↓	10			225			225			230	
	3	↓	↓			305			300			300	
				/	/	/							
						1000			995				
VAV 1-2	1	SH	8"ø			110			120			115	
	2	↓	↓			110			110			115	
	3	↓	↓			110			110			110	
	4	↓	10"ø			330			330			325	
	5	↓	↓			330			335			340	
						/			/				
						990			1005				
1-3	1	SH	12			390			390			390	
	2	↓	10			335			305			300	
	3	↓	L			335			335			335	
	4	↓	12			500			500			500	
	5	↓	10			230			230			230	
						/			/				
						1790			1760				

REMARKS:

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME:

PROJECT: Henwood JOB#: 1120.10

SYSTEM: DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
1-4	1	S4	12			380			390			390	
	2	↓	↓			380			390			390	
	3	S2	10			260			250			250	
						/			/				
						1020			1030				
1-6	1	S4	12			450			450			435	
	3	↓	↓			450			450			450	
	4	↓	6			40			40			45	
	5	↓	↓			30			30			40	
	6	↓	8			110			110			110	
						/			/				
						1080			1080				
1-5	1	S4	12			450							
						/							
						450							
1-7	1	S4	8			170			170			160	
	2	↓	10			320			320			325	
	3	↓	↓			255			255			255	
	4	↓	↓			255			255			250	
						1000			1000				

REMARKS:

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME:
JOB#: 1120.10

PROJECT: Heartwood

SYSTEM:

DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
1-8	1	S4	10			270			275			275	
	2	↓	↓			270			275			275	
	3					315			325			325	
	4					315			315			315	
						/			/			/	
						1220			1240			1240	
1-9	1	S4	8			200							
	2		↓			200							
	3		6			80							
	4		10			350							
	5		4			100							
	6	↓	10			260							
	7	S5	8			180							
	8	S5	↓			185							
	9	S2	12			425							
						1975							
1-10	1	S4	14x10	omit		200			0			0	Deleted
	2	S4	10			305			310			310	
	3	S4	10			305			310			310	
						610			620			620	

REMARKS:

air systems of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME:

PROJECT: Hardwood JOB#: 1820.19

SYSTEM: DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
1-11	1	SS	14			500							
	2	↓	↓			500							
						/							
						1000							
1-12	1	SS	10			240							
	2	↓	↓			240							
						/							
						480							
1-13	1	SA	10			225			225			225	
	2					225			230			230	
	3					225			225			225	
	4	↓	↓			225			230			230	
						/			/			/	
						900			910			910	

REMARKS:

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME: Lane / Dawson

JOB#: 1120.10

PROJECT: Heywood

SYSTEM:

DATE: 5-3-00

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
1-17	1	S4	16			460							
						/							
						460							
1-18	1	S4	10			260				265			
	2	↓	↓			315				315			
						220				220			
						280				270			
						280				265			
						1355				1335			
1-20	1	S4	8			110		80 100				100	(1)
	2		↓			110		95 95				95	
	3		6			70		60				60	
	4		↓			60		55 55				55	
	5		10			350		380				300	
	6		10			350		325 325				325	
	7		10			350		325				325	
	8		↓			80		80 80				80	
						/						/	
						1460						1340	
1-19	1	S4	14			530							
						530							

REMARKS: (1) Box to Long Runs with small ducts excessive 90's.

air systems of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

PROJECT: Heywood

NAME:

JOB#: 1120.10

SYSTEM:

DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
1-23	1	S4	8			160			170				
	2	|	6			90			90				
	3	|	8			110			120				
	4	v	10			290			275				
	5		8			110			110				
						/			/				
						760			765				
1-24	1	S4	10			305			305				
	2	|	|		225			220				
	3	|	|		470			470				①
						/			/				
						1000			995				
1-25	1	S4	10			205			205				
	2	|	8			125			170				
	3	|	10			205			220				
	4	|	|		300			300				
	5	v	|			285			290				
						/			/				
						1120			1135				

REMARKS: ① OUTLET NOISEY AT DESIGN CFM

air systems of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME:

PROJECT: Heartwood JOB#: 1120.19

SYSTEM: DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
1-26	1	54	12			460			400				
	2	↓	↓			400			400				
	3	↓	↓			400			400				
						/			/				
						1200			1200				
1-27	1	54	12			450			440				
	2	↓	↓			450			430				
	3	↓	↓			450			440				
	4	↓	6			110			100				
	5	↓	4			110			110				
						/			/				
						1570			1520				
1-28	1	54	10			255			250				
	2	↓	↓			255			250				
	3	↓	↓			340			340				
	4	↓	8			165			165				
	5	↓	12			450			450				
						/			/				
						1465			1455				

REMARKS:

air systems of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME:

PROJECT: Heartwood

JOB#: 12010

SYSTEM:

DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
1-29	1	S 4	10			260			260				
	2	1	12			445			450				
	3	S2	16			220			225				
						/			/				
						925			935				

REMARKS:

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

PROJECT: HERNDON

NAME: Chris Bourke
JOB#: 112010

SYSTEM:

DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
2-1	1	52	16"ϕ			960							
	2	↓	↕			960							
						/							
						1920							
2-2	1	52	16ϕ			850							
	2	52				850							
						/							
						1700							
VAV2-3	1	54	12"ϕ			450			450			450	
	2	↓	8"			190			250			190	
	3	↓	10"			335			280			315	
						/			/			/	
						975			980			955	

REMARKS:

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME: Ron Benbo
JOB#: 1120.10

PROJECT: HENWOOD

SYSTEM:

DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
VAV2-4	1	SI	10"Ø			315						320	
	2	↓	↓			315						320	
	3					305						310	
	4					305						300	
						/						/	
						1240						1250	
VAV2-5	1	SI	12Ø			400			410			405	
	2	↓	↓			400			400			400	
	3					400			410			400	
	4		8"Ø			110			110			115	
	5		↓			110			110			110	
	6	↓	8"Ø			130			130			130	
						/						/	
						1550						1560	
VAV2-6	1	SI	10"Ø			305						320	
	2	↓	↓			305						320	
	3		10"Ø			315						330	
	4	↓	↓			315						325	
						/						/	
						1240						1295	

REMARKS:

air systems of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

PROJECT: HENWOOD

NAME: Chris Beebe

JOB#: 1120.10

SYSTEM:

DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
VAV2-7	1	SH	12"Ø			450						455	
	2	↓	8"Ø			185						185	
	3		10"Ø			335						335	
	4	↓	12"Ø			500						495	
						/						/	
						1470						1470	
VAV2-8	1	SH	8"Ø			110						115	
	2	↓	↓			110						110	
	3		12"Ø			460						460	
	4		↓			450						470	
	5	↓	↓			450						450	
						/						/	
						1570						1605	
VAV2-9	1	SH	12"Ø			520			470			500	
	2	↓	10"Ø			240			340			250	
	3		↓			270			250			270	
	4	↓	↓			290			290			295	
						/			/			/	
						1320			1350			1315	

REMARKS:

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME: Chris Beebe
PROJECT: HENWOOD
JOB#: 1120.10
SYSTEM:
DATE: 5-1-02

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
VAV2-14	1	S4	12"ø			450						445	
	2	↓	1			450						455	
	3	↓	8"ø			110						120	
	4	↓	↓			110						120	
						/						/	
						1120						1140	
VAV2-12	1	S4	12"ø			405						405	
	2	↓	↓			405						405	
	3	↓	8"ø			110						120	
	4	↓	↓			110						120	
	5	↓	12"ø			450						455	
						/						/	
						1480						1505	
2-13	1	S4	10"			260						260	
	2	S4	10"			260						260	
						/						/	
						520						520	

REMARKS:

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME: Chris Beebe
JOB#: 1120.10

PROJECT: HENWOOD

SYSTEM:

DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
Z-14	1	S4	12"ϕ			230						230	
	2	↓	↓			270						265	
	3	↓	↓			295						295	
						/						/	
						795						790	
Z-15	1	S4	12"ϕ			250						245	
	2	↓	↓			250						250	
						/						/	
						500						495	
Z-16	1	S4	10"ϕ			220						220	
	2	↓	↓			220						220	
						/						/	
						440						440	
Z-17	1	S4	10"ϕ			260						250	
	2	↓	↓			260						260	
						/						/	
						520						510	

REMARKS:

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

NAME:

PROJECT: HENWOOD JOB#: 1120.10

SYSTEM: DATE:

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
2-18	1	S4	10"ϕ			260						260	
	2		14"ϕ			530						525	
						790						785	
2-19	1	S4	8"ϕ			110			145 110			110	
	2		↓			110			145 105			105	
	3		12"ϕ			405			460 390			390	
	4		↓			405			200 190			390	
	5		8"ϕ			110			120 110			110	
	6	↓	↓			110			190 100			100	
									1260				
						1250						1205	
2-20	1	S2	8"ϕ			120			160 150			130	
	2	S4	↓			110			170 155			125	
500	3		10"ϕ			330			300 280			325	
Lobby added	4		8"ϕ			110			180 170			120	
	5					110			200 170			120	
	6		12"ϕ			405			460 440			415	
	7		8"ϕ			120			115 110			115	
	8	↓	12"ϕ			405			420 400			460	
						1710			2005 1855			1910	

REMARKS:

air systems of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

PROJECT: LENWOOD

NAME: Chris Beebe

JOB#: 11201.0

SYSTEM:

DATE: 5-1-02

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
2-21	1	S4	12"ø			530			490			540	
	2		10"ø			355			380			335	
	3		↓			200			220			200	
	4		12"ø			380			410			380	
						/						/	
1 Long Duct 1475						1416			"			1455	
2-22	1	S4	10"ø			200			280			200	
	2		↓			330			300			320	
	3		8"ø			175			190			185	
	4		↓			175			100			175	
						/						/	
						880						880	
2-23	1	S4	12"ø			400						405	
	2		↓			400						410	
	3		↓			400						415	
	4		8"ø			130						135	
	5		↓			115						115	
	6		↓			115						110	
						/						/	
						1560						1590	

REMARKS:

air systems of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

PROJECT: HENWOOD

NAME: Chris Beebe

JOB#: 1120.10

SYSTEM:

DATE: 5-1-02

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
2-24	1	54	8"ø			110						110	
	2	↓	L			110						110	
	3		12"ø			410						420	
	4		↓			410						420	
	5	↓				410						420	
						/						/	
						1450						1480	
2-25	1	54	10"ø			255		270				245	
	2	↓	↓			270		250				275	
	3					250		265				235	
	4					250		230				250	
	5	↓	↓			250		255				245	
						/		1270				/	
						1255						1280	
2-26	1	54	10"ø			355		330				330	
	2	↓	8"ø			185		190				190	
	3		12"ø			450		470				470	
	4	↓	10"ø			270		280				280	
						/						/	
						1260						1300	

Tons 12.40 2nd Line

REMARKS:

air systems
of sacramento, inc.

air systems of sacramento, inc.
3850 Happy Lane
Sacramento, CA 95827

Report #7

DOUBLE DUCT VAV DISTRIBUTION REPORT

PROJECT: HELLWOOD

NAME: Rick Becker

JOB#: 1120.18

SYSTEM:

DATE: 5-1-02

VAV	OUTLET			DESIGN			PRELIMINARY			FINAL			NOTE
NUMBER	No.	Type	Size	H Max	C Min	C Max	H Max	C Min	C Max	H Max	C Min	C Max	
2-27	1	S4	8"Ø			175			190			180	
	2	↓	↓			175			195			180	
	3	↓	10"Ø			330			320			335	
						/						/	
						680						695	

REMARKS:

AIR SYSTEMS of SACRAMENTO, INC

3850 Happy Ln
Sacramento, CA 95827

VAV AIR DISTRIBUTION REPORT

PROJECT Henwood — D Wilson

SYSTEM: 1120.10 — DATE: 5-2-02

AREA SERVED:

VAV	OUTLET			DESIGN		PRELIMINARY		FINAL		NOTE
NUMBER	NO.	TYPE	SIZE	MIN	MAX	MIN	MAX	MIN	MAX	
SC	1	S4	10		250				245	
2-1	2	1	8		150				150	
4	3		12		500				470	
2-2	4		12		500				470	
	5		12		500				500	
	6	▼	12		500				440	
					/				/	
					2100				2275	

REMARKS: House Quiet open
SC Heat on Hi Cap for CEH

AIR SYSTEMS of SACRAMENTO, INC

3850 Happy Ln
Sacramento, CA 95827

VAV AIR DISTRIBUTION REPORT

PROJECT Henwood

SYSTEM: 1120,10 DATE: 5-2-02

AREA SERVED: Bathrooms

VAV	OUTLET			DESIGN		PRELIMINARY		FINAL		NOTE
NUMBER	NO.	TYPE	SIZE	MIN	MAX	MIN	MAX	MIN	MAX	
2nd Floor	82		6"		80				80	
Mens CV					/					
					80					
Womens	82		6"		80				80	
CV					/					
					80					

REMARKS:

AIR SYSTEMS of SACRAMENTO, INC

3850 Happy Ln
Sacramento, CA 95827

VAV AIR DISTRIBUTION REPORT

PROJECT Hemwood

SYSTEM: 1120.10 DATE:

AREA SERVED:

VAV	OUTLET			DESIGN		PRELIMINARY		FINAL		NOTE
NUMBER	NO.	TYPE	SIZE	MIN	MAX	MIN	MAX	MIN	MAX	
Main Exhaust	1	E1	10x10x10	100	150	225			150	
EF1	2	↓	10x10		250	240			250	
	3		10x10		150	220			150	
	4	↓	10x10		250	300			250	
	5	E1	10x10x10		280	370			250	
	6	E1	10x10x10		280	310			280	
	7	E1	6x6x6		90	140			90	
	8	E1	6x6x6		90	150			90	
					/	1855				
					1540					
EF2	1	E1	8x8		250				230	
	2	E1	6x6		110				110	
					/				/	
					360				340	
EF-3	1	E1	14		350					
Breakroom					/					
					350					

REMARKS: