

INSULATE ALL DUCTS EXPOSED TO UNCONDITION SPACE.
 PROVIDE R12. DENSITY REINFORCED, FOIL FACED
 FLEXIBLE DUCT INSULATION WITH VAPOUR SEAL.
 + GASPROOFING

MAINTAIN STRUCTURAL INTEGRITY OF HOUSE
 WHEN ROUTING DUCTWORK

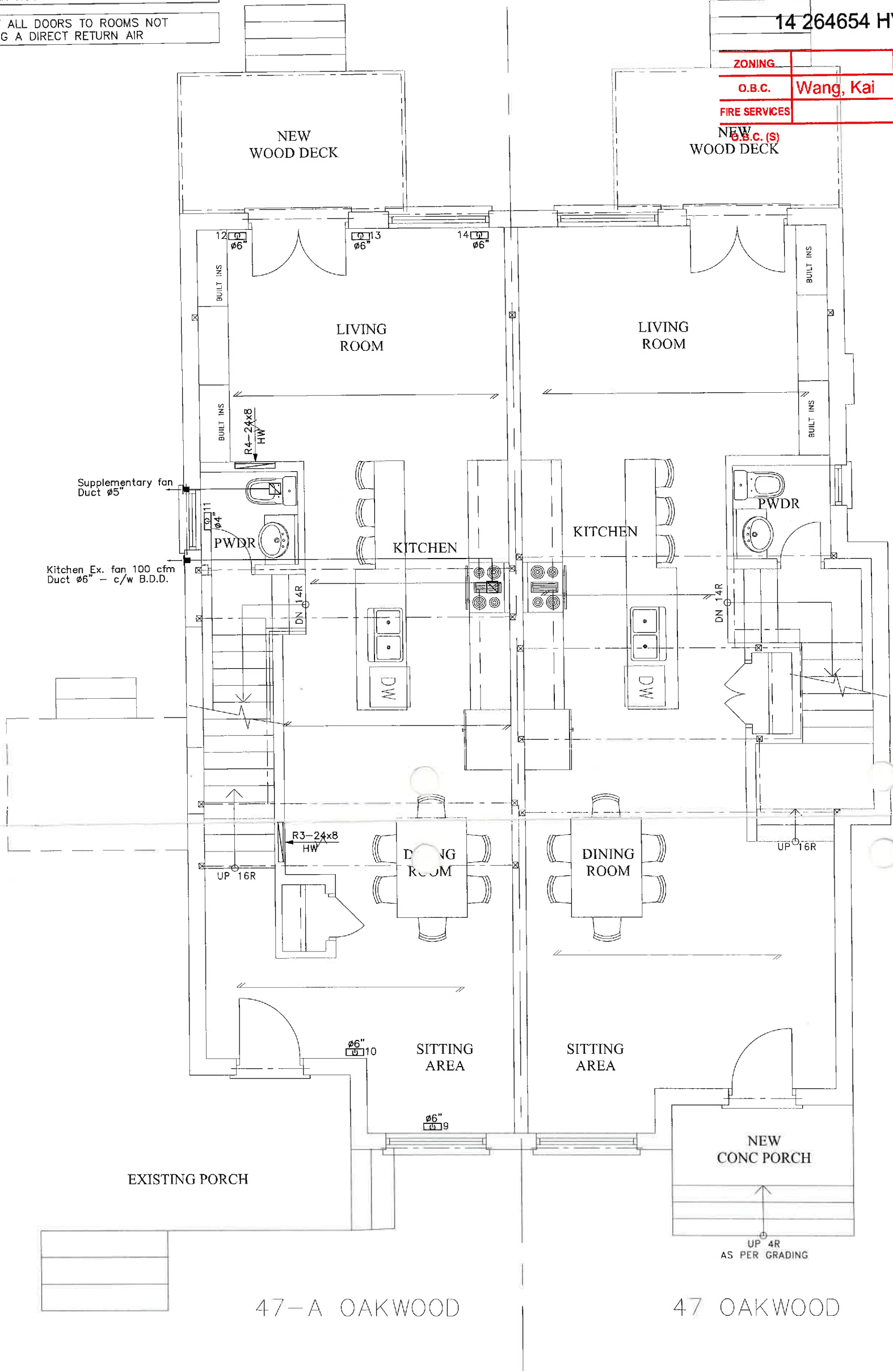
UNDERCUT ALL DOORS TO ROOMS NOT
 HAVING A DIRECT RETURN AIR

TORONTO Building

PERMIT REVIEWED FOR COMPLIANCE WITH
 THE ONTARIO BUILDING CODE

14 264654 HVA 00

ZONING		
O.B.C.	Wang, Kai	16/Jun/2015
FIRE SERVICES		



THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN, AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE ONTARIO BUILDING CODE TO DESIGN THE WORK SHOWN ON THE ATTACHED DOCUMENTS.

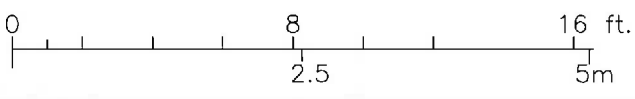
QUALIFICATION INFORMATION
 REQUIRED UNLESS DESIGN IS EXEMPT UNDER 3.2.4.3.(5) OF THE BUILDING CODE

DAN D.M. PUSICA 21266
 NAME SIGNATURE B.C.M.

REGISTRATION INFORMATION
 REQUIRED UNLESS DESIGN IS EXEMPT UNDER 3.2.4.7 OF THE BUILDING CODE

YMSD Consulting 22265
 FIRM NAME B.C.M.

TORONTO Building RECEIVED 05/Jun/2015



No:	DATE:	ISSUED:
0	JAN. 20/15	FOR PERMIT



226 Pacific Ave, Toronto, ON, M6P 2P5
 Tel:(416) 388-8444; Fax:(416)849-0390
 EMAIL: ymsd@ymsd.com www.ymsd.com

PROJECT NAME:
47A Oakwood Ave.
 CITY: Toronto

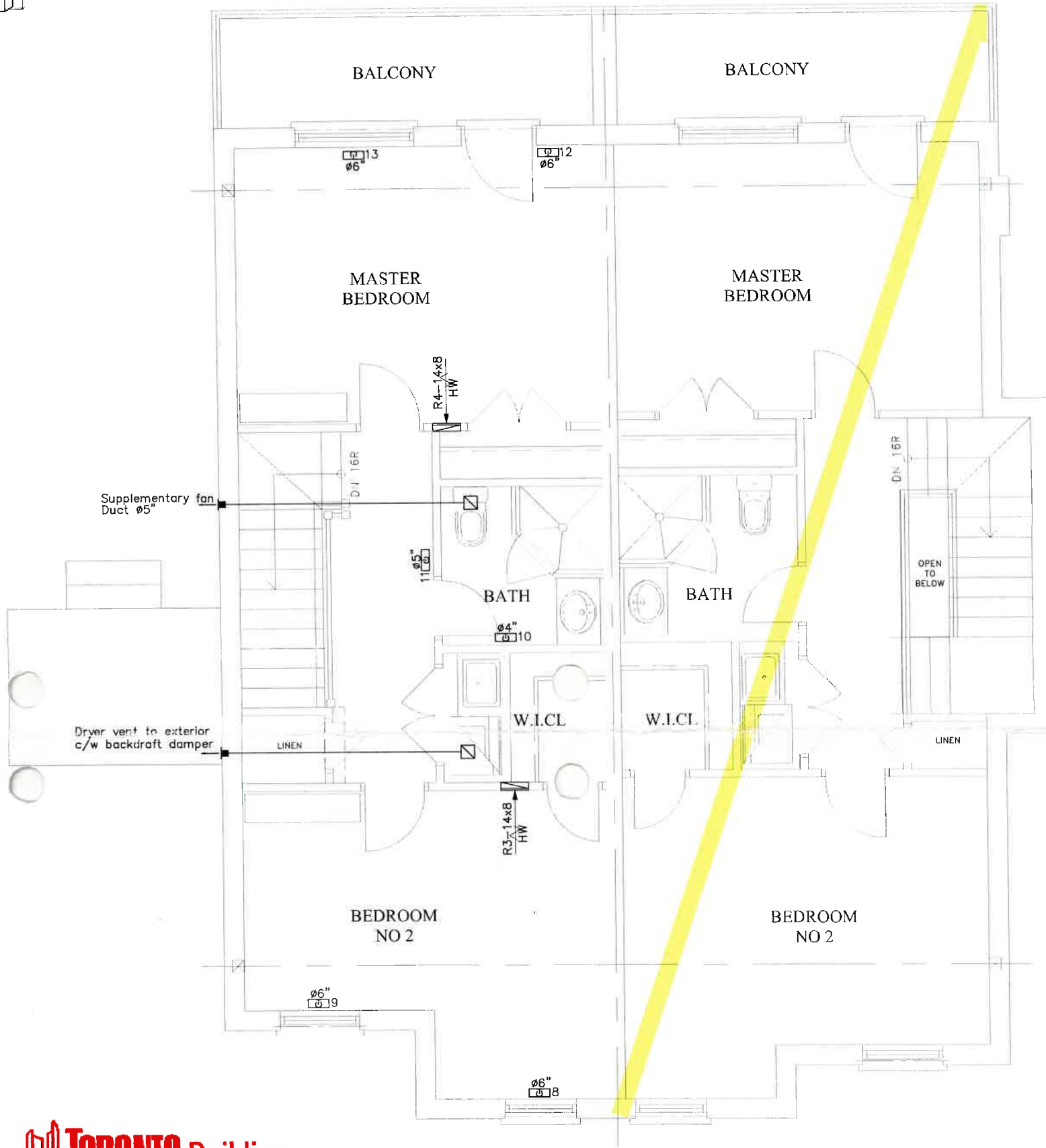
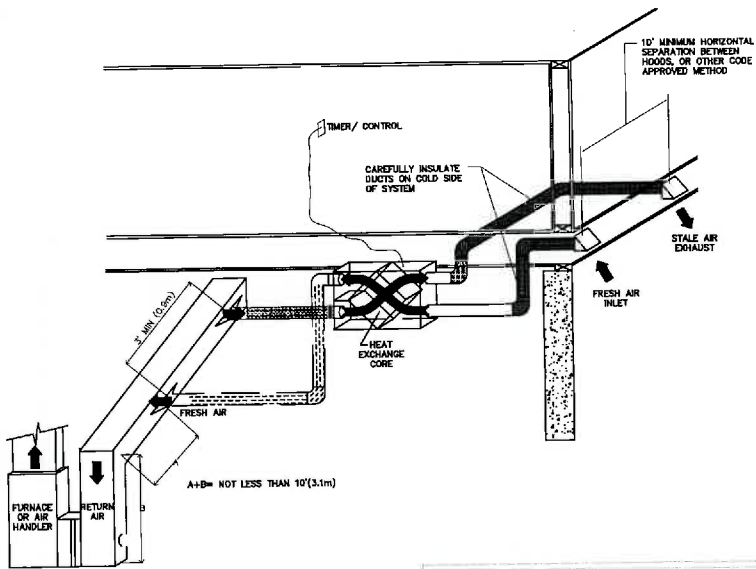
DRAWING NAME:
**HVAC LAYOUT
 MAIN FLOOR**

DESIGNED/DRAWN BY MB	SCALE: 3/16"=1'-0"
DRAWING DATE 04 JUN. 2015	PROJECT NO. E116
	DRW. NO M-2

HRV Lifebreath Model 95MAX
PERFORMANCE

E.S.P cfm (L/s) @ 0.5" (125 Pa) 60 (29)
Maximum Temperature Recovery 88% Sensible Effectiveness
@ 60 cfm (29 L/s) (CSA C439M) 88% Sensible Efficiency
@ 60 cfm (29 L/s) 32°F (0°C) 75% Sensible Efficiency
@ 61 cfm (29 L/s) -13°F (-25°C) 68% Sensible Efficiency
VAC @ 60HZ 120
WATTS / Low speed 59
WATTS / High speed 89
Amp rating 0.9

THERMALLY CONDUCTIVE, PATENTED ALUMINUM CORE
The cross-flow heat recovery core transfers heat between the two airstreams. It is easily removed for cleaning or service.
MOTORS AND BLOWERS - Each air stream has one centrifugal blower driven by a common PSC motor. 5 speed fan operation.
FILTERS - Washable air filters in exhaust and supply air streams.
MOUNTING THE HRV - Four threaded inserts at corners of cabinet.
DEFROST - Recirculating defrost system.
DEHUMIDISTAT - Adjustable Internal Dehumidistat.
Drain connections 2 - 1/2" (12 mm) OD.
CONTROLS - Lifestyle MAX Digital Control
WEIGHT 52 lbs. (23.6 kg)
*All Duct Connections 6" (150mm)



TORONTO Building

PERMIT REVIEWED FOR COMPLIANCE WITH
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14 264654 HVA 00

ZONING		
O.B.C.	Wang, Kai	16/Jun/2015
FIRE SERVICES		
O.B.C. (S)		

INSULATE ALL DUCTS EXPOSED TO UNCONDITION SPACE,
PROVIDE R12. DENSITY REINFORCED, FOIL FACED
FLEXIBLE DUCT INSULATION WITH VAPOUR SEAL.
+ GASPROOFING

MAINTAIN STRUCTURAL INTEGRITY OF HOUSE
WHEN ROUTING DUCTWORK

UNDERCUT ALL DOORS TO ROOMS NOT
HAVING A DIRECT RETURN AIR

47-4 OAKWOOD

47 OAKWOOD

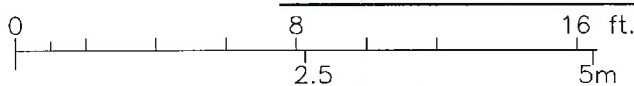
TORONTO Building RECEIVED 16/Jun/2015

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QUALIFICATION INFORMATION
REQUIRED UNLESS DESIGN IS EXEMPT UNDER 3.2.4.3.(4) OF THE BUILDING CODE

DAN D.M. PUSICA 21286 BCN
NAME SIGNATURE
REGISTRATION INFORMATION
REQUIRED UNLESS DESIGN IS EXEMPT UNDER 3.2.4.7 OF THE BUILDING CODE

YMSD Consulting 29285 BCN
FIRM NAME



No:	DATE:	ISSUED:
0	JUN. 04/15	FOR PERMIT
1	JUN. 15/15	AS PER CITY COMMENTS

YMSD CONSULTING

226 Pacific Ave, Toronto, ON, M6P 2P5
Tel:(416) 388-8444; Fax:(416)849-0390
EMAIL: ymsd@ymsd.com www.ymsd.com

PROJECT NAME:
47A Oakwood Ave.
CITY: Toronto

DRAWING NAME:
HVAC LAYOUT
3rd FLOOR

DESIGNED/DRAWN BY MB/DS	SCALE: 3/16"=1'-0"
DRAWING DATE 15 JUN. 2015	PROJECT NO. E116
	DRW. NO M-4

INSULATE ALL DUCTS EXPOSED TO UNCONDITION SPACE.
 PROVIDE R12. DENSITY REINFORCED, FOIL FACED
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MAINTAIN STRUCTURAL INTEGRITY OF HOUSE
 WHEN ROUTING DUCTWORK

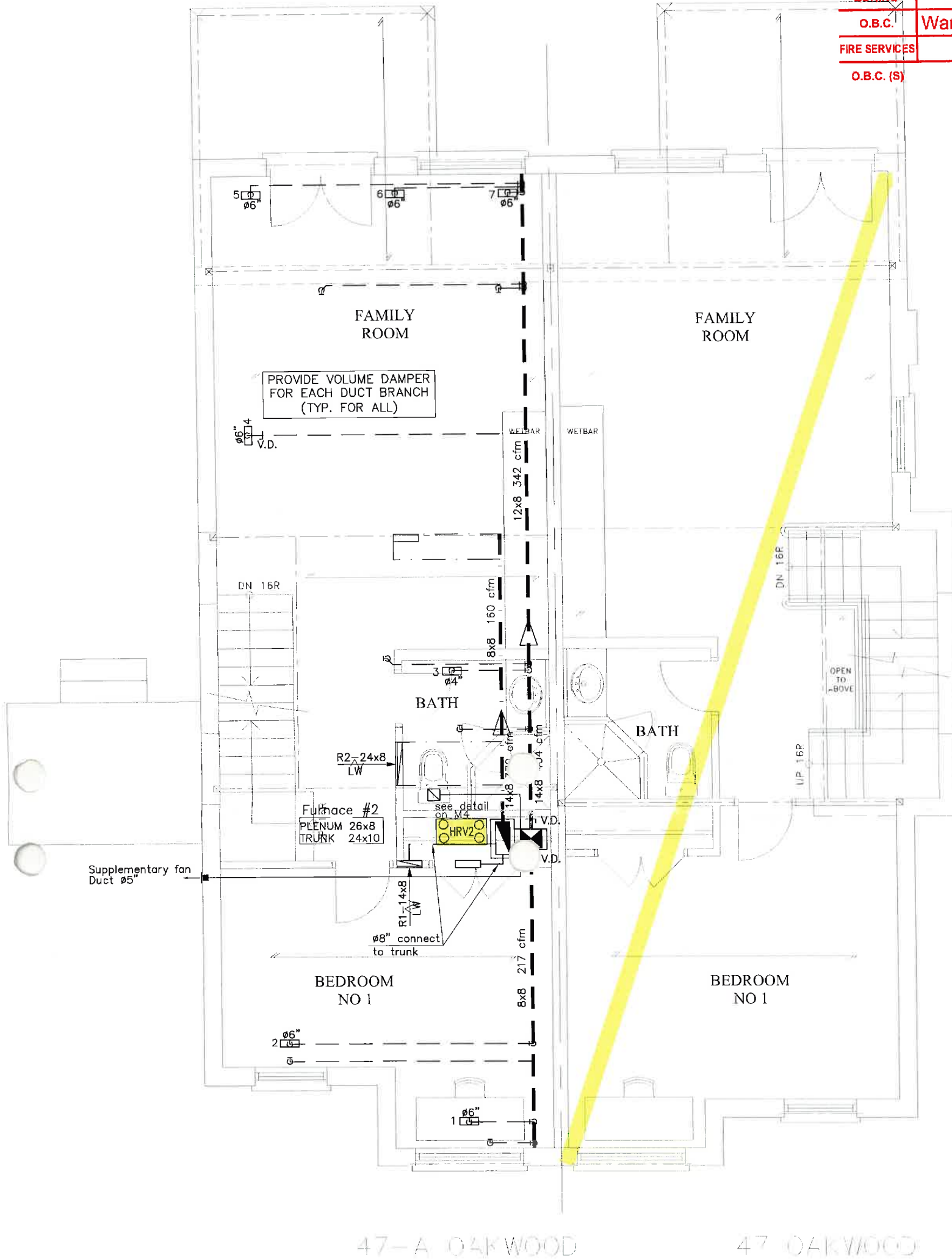
UNDERCUT ALL DOORS TO ROOMS NOT
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TORONTO Building

PERMIT REVIEWED FOR COMPLIANCE WITH
 THE ONTARIO BUILDING CODE

14 264654 HVA 00

ZONING		
O.B.C.	Wang, Kai	16/Jun/2015
FIRE SERVICES		
O.B.C. (S)		



47-A OAKWOOD

47 OAKWOOD

Furnace #2 - 2ND & 3RD Floor

No:	DATE:	ISSUED:
0	JUN. 04/15	FOR PERMIT
1	JUN. 15/15	AS PER CITY COMMENTS

3RD	6	2	2
2ND	7	2	1
1ST	..	..	..
BSM	..	..	..
S/A/R/A/FAN			

Heat loss:	IN	OUT
27 MBH	40 MBH	38 MBH
Furnace model No.		
Am. Standard AUH1B040A9H21B		
cfm@.5w.c.	621 cfm	
COOLING	A/C-1.5 Tons	

THE UNDERSIGNED HAS REVIEWED AND TAKES RESPONSIBILITY FOR THIS DESIGN, AND HAS THE QUALIFICATIONS AND MEETS THE REQUIREMENTS SET OUT IN THE ONTARIO BUILDING CODE TO DESIGN THE WORK SHOWN ON THE ATTACHED DOCUMENTS.

QUALIFICATION INFORMATION
 REQUIRED UNLESS DESIGN IS EXEMPT UNDER 3.2.4.3.(9) OF THE BUILDING CODE

DAN D.M. PUSICA 21266
 NAME SIGNATURE PSN

REGISTRATION INFORMATION
 REQUIRED UNLESS DESIGN IS EXEMPT UNDER 3.2.4.7 OF THE BUILDING CODE

YMSD Consulting 29265
 FIRM NAME BCN

226 Pacific Ave, Toronto, ON, M6P 2P5
 Tel:(416) 388-8444; Fax:(416)849-0390
 EMAIL: ymsd@ymsd.com www.ymsd.com

PROJECT NAME:
 47A Oakwood Ave.
 CITY: Toronto

DRAWING NAME:
 HVAC LAYOUT

DESIGNED/DRAWN BY
 MB/DS

SCALE:
 3/16"=1'-0"

DRAWING DATE
 16 JUN 2015

PROJECT NO.
 14 264654 HVA 00

DRW. NO
 3



GENERAL CONTRACT DRAWING

NOTES & CONDITIONS:
 CONTRACTOR SHALL CHECK AND VERIFY DATA NOTED HEREIN WITH THE SITE CONDITIONS AND WILL BE RESPONSIBLE FOR REPORTING ANY DISCREPANCIES TO THE DESIGNER PRIOR TO SUBMISSION OF TENDER BID AND COMMENCEMENT OF CONSTRUCTION.

CONTRACTOR SHALL PROVIDE ALL SHOP DRAWINGS REQUIRED TO COMPLETE THE PROJECT, AND SHALL SUBMIT THESE TO YMSD CONSULTING FOR APPROVAL.

ALL DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF DESIGN AND CONSTRUCTION INTENT, ARE THE PROPERTY OF YMSD CONSULTING, AND CANNOT BE USED OR DUPLICATED WITHOUT WRITTEN AUTHORIZATION OF THE DESIGNER.

ALL DRAWINGS AND SPECIFICATIONS SHALL BE RETURNED TO YMSD CONSULTING AFTER PROJECT COMPLETION.

CONSTRUCTION TO PROCEED ONLY ON WRITTEN AUTHORIZATION.

MECHANICAL SPECIFICATION

GENERAL

MAKE SITE VISIT(S) AS NECESSARY BEFORE TENDER TO CHECK AND VERIFY ALL EXISTING CONDITIONS. MAKE ALLOWANCE FOR ANY NEW OR EXISTING SERVICE AND EQUIPMENT REALLOCATIONS NECESSARY TO COMPLETE THE WORK AND INCLUDE IN THE TENDER PRICE.

THE DRAWINGS SHOW THE GENERAL INTENT OF THE WORK, NOT THE DETAILS OF INSTALLATION. CO-ORDINATE THE ROUTING AND INSTALLATION OF ALL MECHANICAL SERVICES WITH ALL EXISTING CONDITIONS, STRUCTURE AND THE WORK OF ALL OTHER TRADES.

DO NOT SCALE MECHANICAL DRAWINGS. REFER TO ARCHITECTURAL OR INTERIOR DESIGN DRAWINGS FOR THE EXACT LOCATION OF ANY DEVICES, FIXTURES, ETC.

BASE BUILDING DRAWINGS AND SPECIFICATIONS ARE TO BE READ IN CONJUNCTION WITH THESE DRAWINGS AND SPECIFICATIONS SUCH THAT THE MAXIMUM CONDITIONS WILL GOVERN AND BE ALLOWED FOR.

PROVIDE WORK IN ACCORDANCE WITH ALL APPLICABLE CODES, BYLAWS AND TO THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION. MAKE APPLICATION, PROVIDE, OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND INSPECTIONS.

ENSURE THAT BOTH PROVINCIAL AND FEDERAL TAXES ARE INCLUDED WHERE REQUIRED.

PROVIDE A WRITTEN WARRANTY FOR ALL MATERIALS, EQUIPMENT AND LABOR FOR A ONE-YEAR PERIOD TO BEGIN AT THE TIME WHEN THE WORK IS DESIGNATED ACCEPTABLE BY THE CONSULTANT.

CO-ORDINATE THE MECHANICAL WORK WITH ALL OTHER TRADES AND ENSURE THAT ALL SUBCONTRACTORS ARE OF COMPATIBLE UNION AFFILIATIONS.

PROVIDE IN THE TENDER PRICE ANY COSTS FOR PREMIUM TIME OUTSIDE OF NORMAL WORKING HOURS TO COMPLETE THE WORK ON SCHEDULE AND TO MAINTAIN ALL EXISTING MECHANICAL SYSTEMS IN OPERATION.

PROVIDE ALL CLEAN-UPS, STORAGE, LIFTING, FLASHING, DRILLING, CUTTING AND PATCHING AS REQUIRED. OBTAIN PERMISSION BEFORE PENETRATING FLOOR SLAB OR STRUCTURE. PROVIDE X-RAY OF SLAB IF REQUIRED BY LANDLORD OR BASE BUILDING STRUCTURAL CONSULTANT. PATCH AND SEAL ALL OPENINGS IN FLOORS, WALLS AND PARTITIONS WITH FIRE RESISTANT INSULATION AND APPROVED FIRE STOP SEALANT.

NO ALTERNATIVES FOR EQUIPMENT SHALL BE ACCEPTED WITHOUT WRITTEN APPROVAL OF THE CONSULTANT.

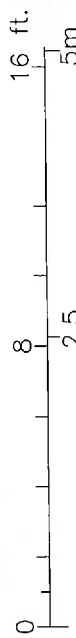
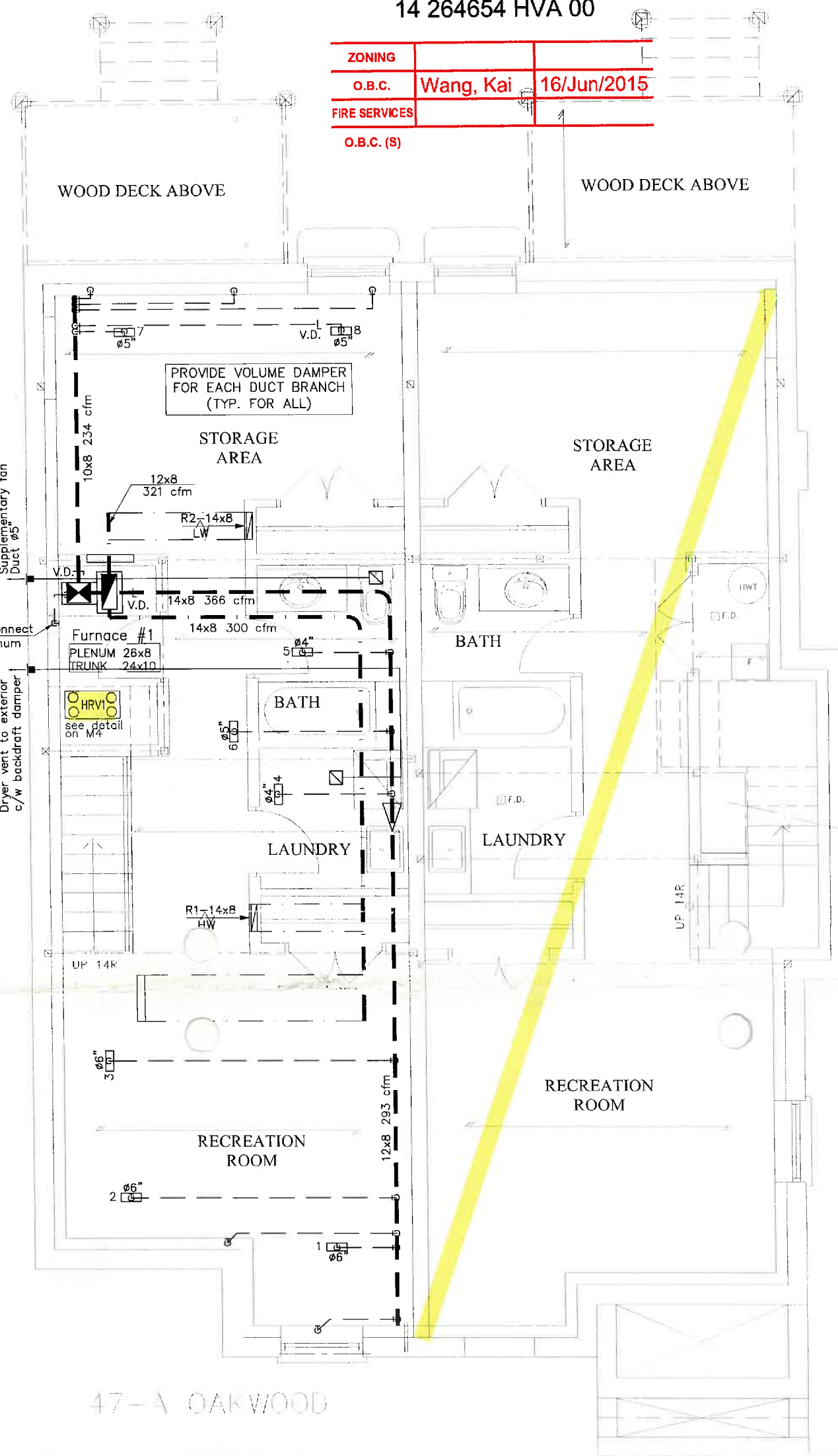
PRODUCTS NOT SPECIFICALLY SPECIFIED SHALL BE OF A QUALITY CONSISTENT

INSULATE ALL DUCTS EXPOSED TO UNCONDITION SPACE. PROVIDE R12. DENSITY REINFORCED, FOIL FACED FLEXIBLE DUCT INSULATION WITH VAPOUR SEAL. + GASPROOFING

MAINTAIN STRUCTURAL INTEGRITY OF HOUSE WHEN ROUTING DUCTWORK

UNDERCUT ALL DOORS TO ROOMS NOT HAVING A DIRECT RETURN AIR

ZONING		
O.B.C.	Wang, Kai	16/Jun/2015
FIRE SERVICES		
O.B.C. (S)		



HVAC LEGEND

SYMBOL	DESCRIPTION
→	SUPPLY AIR DUCTWORK (SINGLE LINE)
←	RETURN AIR DUCTWORK (SINGLE LINE)
△	REDUCE DUCT--RD
□	S.A. CEILING DIFFUSER S.A. FLOOR DIFFUSER S.A. WALL DIFFUSER
□	R.A. REGISTER
▽	VOLUME DAMPER
→	S.A.
←	R.A.
→	E.A.
→	S.D.

WALL SWITCH OPERATED, BATHROOM EXH FAN FOR 80% CFM CFM AT 3/8" E.S.P. EQUAL TO "REVERSOMATIC" QCF-95. FAN AT 1,050 RPM, MOTOR 0.60 AMPS, POWER SUPPLY 115V/1Ø/60. UNIT C/W MOUNTING KIT, AIR INTAKE GRILLE AND 5"Ø EXHAUST DUCT THROUGH THE WALL TERMINATED WITH WALL BOX. INSULATE LAST 5'-0" OF EXHAUST DUCT WITH 1" THICK THERMAL INSULATION.

ALL DRAWINGS, CALCULATIONS AND SPECIFICATIONS ARE THE PROPERTY OF YMSD CONSULTING AND MAY NOT BE REPRODUCED, MODIFIED OR ALTERED WITHOUT EXPRESSED WRITTEN CONSENT. THE DRAWINGS ARE DATED AND USE OF THESE DRAWINGS AFTER ONE YEAR FROM THE DATED NOTED IS NOT AUTHORIZED. CONTRACTOR SHALL CHECK ALL CONDITIONS BEFORE PROCEEDING WITH WORK. LATEST MUNICIPAL APPROVED DRAWINGS ONLY TO BE USED DURING INSTALLATION OF HEATING SYSTEM. YMSD CONSULTING IS NOT LIABLE FOR ANY CLAIMS ARISING FROM UNAUTHORIZED USE OF THESE DRAWINGS OR FROM ANY CHANGES TO ACCEPTED STANDARDS AND/OR THE ONTARIO BUILDING CODE.

Toronto Building RECEIVED 16/Jun/2015

Furnace #1 - Basement & Main Floor

No:	DATE:	ISSUED:	3RD	..	..	..	Heat loss:	IN	OUT
0	JUN. 04/15	FOR PERMIT	2ND	..	..	..	33 MBH	40 MBH	38 MBH
1	JUN. 15/15	AS PER CITY COMMENTS	1ST	6	2	2	Furnace model No. Am. Standard AUH1B040A9H21B cfm@.5w.c. 621 cfm		
			BSM	8	2	2	COOLING A/C-1.5 Tons		
			S/A/R/A/FAN						



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 EMAIL: ymsd@ymsd.com www.ymsd.com

PROJECT NAME:
47A Oakwood Ave.
 CITY: Toronto

DRAWING NAME:
HVAC LAYOUT BASEMENT

DESIGNED/DRAWN BY
MB/DS
 SCALE:
3/16"=1'-0"
 DRAWING DATE
15 JUN. 2015
 PROJECT NO.
E116
 DRW. NO
M-1