

			Page 1 of 3
Addendum No.: 1		Date 0f Adde	endum: 12 March 2019
(	CT DAS I Construction S	ervices I Office of Legal Affair Department of Motor Vehicles Hamden Roof and HVAC 1985 State Street Hamden, CT BI – MM-54	s, Policy, and Procurement
Orig	inal Bid Due Date / Time:	March 27, 2019	1:00 PM
	Previous Addendums: NO	NE	
то:	<b>Prospective Bid Proposers:</b> This Addendum forms part of the for this Project dated 12 Novem the Addenda issued for this Pro-	he "Contract Documents" and modifies on the and the space provided on Section 0 bject on the space provided on Section 0	or clarifies the original "Contract Documents" hall acknowledge receipt of the total number 10 41 00 Bid Proposal Form.
	Failure to acknowledge recei on Section 00 41 00 Bid Prop	pt of the total number the Addenda iss osal Form <u>shall</u> subject Bid Proposer	ued for this Project on the space provided s to disqualification.
	The following clarifications a	re applicable to drawings and specifi	cations for the project referenced above.
Item 1	<u>l:</u>		
	GENERAL INFORMATION: Bi	d Phase Meeting Attendance Log	
Item 2	<u>2:</u>		
	Section 01 50 00 - Temporary I	Facilities and Controls, Paragraph 3.3, S	Subparagraph B:
	<b>REVISION:</b> Delete requirement Requirements and Field Office	t for Field Office Computer System, Com Internet Service.	nputer Software, Miscellaneous Computer
	DELETE: Subparagraph 3, 4, 5	5 and 6	
Item 3	<u>3:</u>		
	In Section 22 11 25 – Facility N	latural-Gas Piping, Paragraph 2.5:	
	DELETE: Subparagraph A		
Item 4	<u>1:</u>		
	In Section 22 11 25 – Facility N	latural-Gas Piping, Paragraph 2.5, Subp	aragraph B:
	DELETE: sub-subparagraph 4		
	SUBSTITUTE: sub-subparagra	aph 4 – " <u>Tamperproof Feature: Lockin</u>	g feature for gas shutoff valves."
Item 5	<u>5:</u>		
	In Section 22 11 25 – Facility N	latural-Gas Piping, Paragraph 2.5, Subp	aragraph C:
	DELETE: Subparagraph C and	l sub-subparagraphs 1 through 4	

### Item 6:

In Section 22 11 25 – Facility Natural-Gas Piping, Paragraph 2.5: Subparagraph D:

DELETE: sub-subparagraph 6

SUBSTITUTE: sub-subparagraph 6 – "Ends: Threaded."

## <u>ltem 7:</u>

In Section 22 11 25 - Facility Natural-Gas Piping, Paragraph 2.7:

DELETE: Paragraph 2.7 – Labeling and Identifying and Subparagraph A



## Addendum No.: 1

## Date 0f Addendum: 12 March 2019

## Item 8:

In Section 22 11 25 – Facility Natural-Gas Piping, Paragraph 3.3: **DELETE:** Subparagraph B and Sub-Subparagraph 1

## Item 9:

In Section 23 01 30.51 – HVAC Air-Distribution System Cleaning, Paragraph 3.5, Subparagraph C: **DELETE:** "*and Section 233216 "Nonmetal Ducts*"

## Item 10

In Section 23 01 30.51 – HVAC Air-Distribution System Cleaning, Paragraph 3.5, Subparagraph D: **DELETE:** 230713 "Duct Insulation"

## SUBSTITUTE: 230700 "HVAC Insulation"

## Item 11:

In Section 23 01 30.51 – HVAC Air-Distribution System Cleaning, Paragraph 3.5

DELETE: Subparagraph G

## Item 12:

In Section 23 33 00 – Air Duct Accessories, Paragraph 2.6, Subparagraph D:

DELETE: "ASHRAE/IESNA 90.2"

#### SUBSTITUTE: "2015 International Energy Conservation Code"

### Item 13:

In Drawing G1.1 Site Layout Plan, Protection Note 7:

DELETE: reference to CT DDC/NYPD

SUBSTITUTE: CT DCS/DMV

## Item 14:

In Drawing M-001 Cover Sheet - Mechanical:

**REVISION:** "Modify General Mechanical Symbols" to include "*Existing Volume Damper to Remain*" and "*Existing Shutoff Valve to Remain*"

**DELETE:** Drawing M-001

SUBSTITUTE: Drawing M-001, dated 03/04/19 Addendum 1

#### Item 15:

In Drawing M-101 First Floor Plan - Mechanical:

REVISION: Modify orientation of Detail 2/M101 First Floor Zoning Plan

DELETE: Drawing M-101

SUBSTITUTE: Drawing M-101, dated 03/04/19 Addendum 1

#### Item 16:

In Drawing M-102 Second Floor Plan - Mechanical:

**REVISION:** Modify orientation of Detail 2/M102 Second Floor Zoning Plan and modify location and scope of work related to existing thermostats.

DELETE: Drawing M-102

SUBSTITUTE: Drawing M-102, dated 03/04/19 Addendum 1



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### Addendum No.: 1

## Date 0f Addendum: 12 March 2019

#### Item 17:

In Drawing M-300 Schedules – Mechanical:

**REVISION:** Modify no hub unions for above ground storm drain in "HVAC Piping/Tubing Material, Joints & Fittings" schedule and trap size in "Plumbing Drain" Schedule.

DELETE: Drawing M-300

SUBSTITUTE: Drawing M-300, dated 03/04/19 Addendum 1

#### <u>Item 18:</u>

In Drawing M-400 Details – Mechanical:

**REVISION:** Modify Detail 1/M-400 Modify ductwork support note to include additional manufacture names and model numbers.

DELETE: Drawing M-300

SUBSTITUTE: Drawing M-300, dated 03/04/19 Addendum 1

#### Item 19:

In response to prospective bidder request for information related to Temporary Field Office and Equipment.

CLARIFICATION: Refer to Section 01 50 00 Temporary Facilities and Controls, Paragraph 3.3, Subparagraph B and Addendum 1.:

#### Item 20:

In response to prospective bidder request for information related to requirement for a project sign.

CLARIFICATION: Refer to Section 01 50 00 Temporary Facilities and Controls, Paragraph 3.3, Subparagraph F for project sign requirements.

All questions must be **emailed** (not **verbal** or by **phone**) to the consulting Architect/Engineer (Hoffman Architects, Email: d.costantini@hoffarch.com) with copies sent to the DAS/CS Project Manager (Lisa Humble, Email: lisa.humble@ct.gov).

End of Addendum 1

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Méllanee Walton, Associate Fiscal Administrative Officer State of Connecticut Department of Administrative Services, Construction Services Office of Legal Affairs, Policy, and Procurement



## 6020 Bid Phase Meeting Attendance Log

Page 1 of 3

DAS/CS Project Title:	Roof and HVAC			
DAS/CS Project No.:	BI-MM-54 Meeting Purpose (insert "X" below)		rpose (insert "X" below):	
Date:	February 25, 2019	X	Pre-Bid	Meeting
Meeting Start Time:	10:00 AM		Post Bi	d Review Meeting
Meeting Location:	Hamden DMV – Entrance to Building		Other:	

Name: Deborah J. Costantini, AIA	Title: Senior Architect
Company/Department: Hoffmann Architects, Inc.	E-mail: <u>d.costantini@hoffarch.com</u>
Street: 2321 Whitney Avenue	Phone: 203-239-6660
City/State/Zip Hamden, CT 06518	FAX:

Name: Kelsey Greenleaf	Title: Senior Project Representative
Company/Department: Hoffmann Architects, Inc.	E-mail: <u>k.greenleaf@hoffarch.com</u>
Street: 2321 Whitney Avenue	Phone: 203-239-6660
City/State/Zip Hamden, CT 06518	FAX:

Name: Solvern field	Title: SHEC
Company/Department:	E-mail:
Street: 131 Adams St	Phone: 300 645 8538
City/State/Zip MAnchester Ct	FAX: 860 645-0226

Name: Frank Ellore	Title:
Company/Department: Shoreline Restoration 110	E-mail: Shoreho exercitoration (Contrastinal)
Street:	Phone: 263 627 7182
City/State/Zip	50 = 1467 0100

Name: Patrich Mindneeny	Title: Sales
Company/Department: ADVINCED Group	E-mail: Parm@HOVIMPIIC.com
Street: 6 west Main st	Phone: 8405367663
City/State/Zip Mystic Ct 26355	FAX: 860 536 7664
Name: JIM PINO JR-	Title: PRUS.
Company/Department:	E-mail: DLYMPLS JIM CALL COM
Street: 77 CHURREN ST	Phone: 203 258-8341
City/State/Zip MILFOND (T 06460	FAX: 203 978 1544



## 6020 Bid Phase Meeting Attendance Log

Page 2 of 3

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Meeting Start Time:	10:00 AM		Post Bid Review Meeting
Meeting Location:	Hamden DMV – Entrance to Building		Other:

Name:	Title:
Dave Lukerk	Eskingtor
Company/Department:	E-mail:
Barrest Inc.	Obulkeskamirettarting. Low
Street:	Phone:
City/State/Zip	(203) 794 0 120
Dowlards of SUSSI	FAX:
Name: A	TT 141
Jacob Homes	line:
Company/Department:	E-mail:
Sav-Mor Clark High Line	from O. Couparet in
Street:	Phone:
231 Captain Lewis Dr	560 GL1-9959
City/State/Zip	FAX:
Southington Gt 06489	560-621-9919
Name: KONTAUR TAUTOGLA MILLI	Title:
TOBINI INDIFUS DUTRA MITCH	Pales
Company/Department:	E-mail:
Street:	owner. Wr. reliterell @ Jun Com
Street.	Phone:
City/State/Zip	(05-C5+-1954
20,14 Hill / (1	
Name:	Title:
Chris Comb	t= Stimate.
Company/Department:	
	E-mail:
Young Developers	E-mail: CHRISCO XASOOFINY . COM
Street: 47 (act New	Phone: 4750 Phone: 4750 Phone: 475
Street: 42 CRST WAX	E-mail: 415:500 X45005:119 . COM Phone: 475-414-1013
Young Developers Street: 42 Crest Way City/State/Zip Humbers (T	E-mail: 415360 745005719 . Com Phone: 475-414-1013 FAX:
Street: 42 CRST Way City/State/Zip Humber, CT	E-mail: 415360 745005719 . Com Phone: 475-414-1013 FAX:
Street: 42 CRST Way City/State/Zip Humber, CT	E-mail: 415:50(2745005:119.00) Phone: 475-414-1013 FAX:
Name: JORGE ORFAD	E-mail: 415:500 745:005:119 .001 Phone: 475-414-1013 FAX: Title: PM
Name: JORGE ORFAO	E-mail: <u>4175-414-1013</u> Phone: <u>475-414-1013</u> FAX: Title: PM E-mail: <u>1</u>
VUUNG Developers Street: 42 Crest Wax City/State/Zip Humlen, CT Name: JORGE ORFAO Company/Department: G.L. CAPASS O	E-mail: <u>Miscelydroofiny</u> <u>(01</u> ) Phone: <u>475-414-1013</u> FAX: Title: <u>PM</u> E-mail: <u>jorge</u> <u>Egledyasso</u> <u>(on</u> )
Young Develocios         Street:       42 (rest Way         City/State/Zip       Humlen, CT         Name:       JORGE ORFAO         Company/Department:       G.L. CAPASS O         Street:       74,000000000000000000000000000000000000	E-mail: <u>Misc@Ydsoofing</u> .com Phone: <u>475-414-1013</u> FAX: Title: <u>PM</u> E-mail: jorge egledyasso.com Phone:
Young Developed Street: 42 Crest Way City/State/Zip Humlen, CT Name: JORGE ORFAO Company/Department: G.L. CAPASSO Street: 34 LOYD ST.	E-mail: <u>46326945005719</u> (C) Phone: <u>475-414-1013</u> FAX: Title: <u>PM</u> E-mail: <u>jorge eglenynesso</u> (on Phone: <u>203-469-2810</u>
Young Developeds         Street:       YZ (RST Way         City/State/Zip       Humlen, CT         Name:       JORGE ORFAD         Company/Department:       G.L. CAPASS D         Street:       34 UOYD ST.         City/State/Zip       HENDER ST.	E-mail: <u>461360745005ing</u> .com Phone: <u>475-414-1013</u> FAX: Title: <u>PM</u> E-mail: <u>jorge egleapasso</u> .com Phone: <u>203-469-2810</u> FAX:
YUUNG DEVELOCIOS Street: YZ (RGF WAX City/State/Zip Name: JORGE ORFAO Company/Department: G.L. CAPASSO Street: 34 LOYD ST. City/State/Zip NEW HAVEN	E-mail: <u>HfiscQ Ydroofing</u> (01 Phone: <u>475-414-1013</u> FAX: Title: <u>PM</u> E-mail: <u>jorge EglCayasso</u> (on Phone: <u>203-469-2810</u> FAX:
Yung Develocity         Street:       YZ (RST Way         City/State/Zip       Humlen, CT         Name:       JORGE ORFAO         Company/Department:       G.L. CAPASSO         Street:       34 LLOYD ST.         City/State/Zip       NEW HAVEN         Name:       Value	E-mail: <u>415:005:019.000</u> Phone: <u>475-414-1013</u> FAX: Title: <u>PM</u> E-mail: <u>joige EglCayasso.com</u> Phone: <u>203-469-2810</u> FAX: Title:
YUUNG DEVELOSIOS Street: YZ (RGF WAX City/State/Zip Name: JORGE ORFAO Company/Department: G.L. CAPASSO Street: 34 LOYD ST. City/State/Zip NEW HAVEN Name:	E-mail: $415005719.007$ Phone: $475-414-1013$ FAX: Title: PM E-mail: $30592.0074074550.007$ Phone: $203-469-2810$ FAX: Title:
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Yung Develocios         Street:       Y2 (RST Way         City/State/Zip       Humlen, CT         Name:       JORGE ORFAO         Company/Department:       G.L. CAPASSO         Street:       34 UOYD ST.         City/State/Zip       NEW HAVEN         Name:       Name:         Name:       Steet:         Name:       Name:	E-mail: $4153CQ + 45005iny = Con Phone: 475 - 414 - 10i3FAX:Title: PME-mail: 3059CQ + 45005iny = Con Phone: 203 - 414 - 10i3FAX:Title: 203 - 469 - 2810FAX:Title: 203 - 469 - 2810FAX:$
Young Develocios         Street:       Y2 (rest Way         City/State/Zip       Humber CT         Name:       JORGE ORFAO         Company/Department:       G.L. CAPASS O         Street:       34 UOYD ST.         City/State/Zip       NEW HAVEN         Name:       Name:         Name:       Steete Pumpurey         Company/Department:       Steete Pumpurey         City/State/Zip       NEW HAVEN	E-mail: $4153CQ 745005ing con Phone: 475-414-10i3FAX:Title: PME-mail: 305gc CglCarpasso con Phone: 203-4667-2810FAX:Title:Title: PME-mail: pME-mail: pM$
Young Develocios         Street:       Y2 (rest way         City/State/Zip       Humlen, CT         Name:       JORGIE ORFAO         Company/Department:       G.L. CAPASS O         Street:       34 WOYD ST.         City/State/Zip       NEW HAVEN         Name:       Name:         Name:       Steet:         Street:       Steet:         Street:       Street:	E-mail: $4153CQ 745005ing con Phone: 475-414-10i3FAX:Title: PME-mail: 3052CGCA7asso con Phone: 203-469-2810FAX:Title:Title: 203-469-2810FAX:Title: 203-469-2810FAX:$
Name: Name: Name: Name: JORGIE ORFAO Company/Department: G.L. CAPASSO Street: 34 LOYD ST. City/State/Zip NEW HAVEN Name: Name: Street: Street: 151 WATEN ST	E-mail: $4630023090000$ Phone: $475-414-1013$ FAX: Title: PM E-mail: $307209104765000$ Phone: $203-469-2810$ FAX: Title: Title: $9M$ E-mail: $51000000000000000000000000000000000000$
Name: Name: Name: Street: 34 LOYD ST. City/State/Zip Name: Name: Name: Name: Name: Name: Street: 151 WATEN City/State/Zip City/State/Zip	E-mail: $46366745005ing con Phone: 475-414-10i3FAX:Title: PME-mail: 305926916476350.000Phone: 203-469-2810FAX:Title:Title: 9ME-mail: 5164651k16301007ing con Phone: 3350552FAX:$

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6000 - Bid Phase Forms



## 6020 Bid Phase Meeting Attendance Log

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			Page 3 of 3
DAS/CS Project Title:	Roof and HVAC		
DAS/CS Project No.:	BI-MM-54 Meeting Purpose (i		eting Purpose (insert "X" below):
Date:	February 25, 2019	X	Pre-Bid Meeting
Meeting Start Time:	10:00 AM		Post Bid Review Meeting
Meeting Location:	Hamden DMV – Entrance to Building		Other:

Name: Monica Vergara	Title: <i>PM</i>
Company/Department: DIVERSITY Construction Group LLC.	E-mail: Estimating @ Diversity Cq. Com
Street: 531 Cort Land Circle	Phone: 203 699-8387
City/State/Zip Cheshire CT06410	FAX:

Name:	Title: SENIOR ESTIMATON	
MICHAGL BEAULIEU		
Company/Department:	E-mail:	
GREENWOOD INDUSTRIES	MIKEB @ GREENWOOD - INDISTRIE	IES I
Street:	Phone:	cy
JO LEONARDO DK	(860)466-9435	
City/State/Zip	FAX:	
NORTH HAVEN CT.		

Name: John Ciafall	Title: Vice Presilent
Company/Department: New England Masonry + Ropten	E-mail: Jc @ Ne Masonry. Con
Street: 146 sheyidan Dri	Phone: (203) 729-2266 ×108
City/State/Zip Navyatuch CT 06770	FAX: 203 723 9633

Name: Bruce Raulitantis	Title: Estimator
Company/Department:	E-mail: any co the imperial co (U)
Street: 261 Main 44	Phone: 860-632-2158
City/State/Zip Clumwell (+ 06415	FAX:

Name: Kevin GUNFIM	Title:
Company/Department:	E-maily here a coderslocal 12 Com
Street: 19 Betahard RC	Phone: 203-707-4427
City/State/Zip	FAX:

CT DAS - 6020 (Rev: 09.25.18)

SIGN-IN BI-MM-54 - Handen Roof & HUAC Lisa Humble, Project Manager DAS/Dept, of Construction Services 450 Columbus Blud, HHR. CT 860-713-5823 lisa. humble @ ct.gov. Abby LAWSON Drav FISCAL SUNILO EM 327 40 state st Wetnisfield CT DLIGI 500 263 5002 ANGELO CAVALIERE DMY-FACILITIES 860-209-5727 ANGELO. CAVAUERE CCT. GOV Paul Kavanagh DMV-FACILITIES 40 State St Wethersfield 860 243 5417 Dr 840 982 8140 BRIAN KRASKE Kouren Rovan 703779 1017

## GENERAL MECHANICAL NOTES

## <u>GENERAL</u>

- 1. WHEN A CONFLICT BETWEEN THE DRAWINGS, NOTES AND/OR SPECIFICATIONS OCCUR, THE MORE STRINGENT, AND/OR LARGER QUANTITY AND/OR MORE EXPENSIVE SHALL APPLY. THE REQUIREMENTS LISTED WITHIN NOTES OR SPECIFICATIONS SHALL BE REQUIRED, PROVIDED AND INSTALLED WHETHER SPECIFICALLY INDICATED ON THE DRAWINGS OR NOT.
- 2. IT IS THE INTENTION OF THE SPECIFICATIONS AND DRAWINGS TO PROVIDE FOR FINISHED WORK, TESTED AND READY FOR OPERATION.
- 3. ITEMS AND SERVICES NOT SHOWN ON DRAWINGS OR SPECIFICATIONS BUT REQUIRED TO RENDER
- 4. WORK OF THIS SECTION SHALL BE GOVERNED BY THE CONTRACT DOCUMENTS. PROVIDE MATERIALS, LABOR, EQUIPMENT AND SERVICES NECESSARY TO FURNISH, DELIVER AND INSTALL ALL WORK AS SPECIFIED AND AS REQUIRED BY JOB CONDITIONS. WHERE A CONFLICT EXISTS BETWEEN THESE NOTES, THE DRAWINGS AND THE SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- BE CONSIDERED SUB-CONTRACTOR DOCUMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND ALL SUBCONTRACTORS TO INCLUDE THE PROVISIONS AND INSTALLATION OF ALL NECESSARY WORK AND MATERIALS FOR COMPLETE, OPERATIONAL AND CODE COMPLIANT SYSTEMS. GENERAL DESIGN CONCEPTS INDICATED MUST BE FOLLOWED OR BETTERED. THE BID SHALL INCLUDE OFFSETS, ADDITIONAL PIPING, VALVES AND EQUIPMENT AND COMPONENTS AS REQUIRED TO MEET CONSTRUCTION CONDITIONS FOR PROPER OPERATION. DO NOT SCALE DRAWINGS. CONSULT ARCHITECTURAL DRAWINGS FOR SPACE CONDITIONS AND ADDITIONAL REQUIREMENTS.
- CONDITIONS AND WITH THE PROVISIONS OF ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND LAWS.
- 7. WORK SHALL INCLUDE ALL INCIDENTALS, LABOR, MATERIAL, EQUIPMENT, APPLIANCES, SERVICES, HOISTING, SCAFFOLDING, SUPPORTS, TOOLS, CONSUMABLE ITEMS, FEES, LICENSES, AND ADMINISTRATIVE TASKS REQUIRED TO COMPLETE AND MAKE OPERABLE WORK SHOWN ON THE DRAWINGS, SPECIFIED HEREIN AND AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
- 8. STORE MATERIALS INSIDE AND PROTECTED FROM DEBRIS, WEATHER AND MOISTURE.
- 9. THIS CONTRACTOR SHALL PROVIDE AND INSTALL ALL POWER AND CONTROL WIRING REQUIRED FOR EQUIPMENT OPERATION NOT SPECIFICALLY PROVIDED BY OTHERS BUT REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM. THIS CONTRACTOR SHALL PROVIDE MOTOR STARTERS. COORDINATE **REQUIREMENTS WITH DIVISION 26.**
- 10. COORDINATE ALL HVAC WORK AND EQUIPMENT WITH STRUCTURAL STEEL, PLUMBING PIPING, LIGHT FIXTURES, ELECTRICAL EQUIPMENT AND OWNER'S EQUIPMENT.
- 11. ALL EXISTING CONDITIONS AS INDICATED ARE APPROXIMATIONS OF EXACT CONDITIONS TO BE VERIFIED IN THE FIELD. CONTRACTOR SHALL VISIT THE SITE TO VERIFY THE CONSTRUCTION CONDITIONS BEFORE SUBMITTING BID.
- 12. LOCATE ALL BALANCING DAMPERS AT MAIN DUCTWORK ABOVE ACCESSIBLE CEILINGS, OR PROVIDE ACCESS DOORS.
- 13. PROVIDE TRAPPED CONDENSATION DRAIN PIPING FROM COOLING COIL DRAIN PAN TO AN APPROVED POINT OF DISCHARGE WHETHER INDICATED OR NOT.
- 14. REFER TO SPECIFICATION SECTION 230000 FOR ADDITIONAL PENETRATION SEALING REQUIREMENTS. PENETRATIONS TO COMPLY WITH ASTM E84 & E814 AND APPROVED UL 1479 AND SPECIFIC UL ASSEMBLIES AS REQUIRED TO SUIT PENETRATION CONDITIONS.
- SYSTEMS ARE DESIGNED AND DESIGNATED TO SERVICE STAIRS.
- STRUCTURAL CONTRACTOR W/ FLOOR, WALL & ROOF OPENING SIZES.
- 17. THE DRAWINGS AND SPECIFICATIONS ARE DIVIDED INTO SECTIONS TO MEET THE NEEDS OF THE ARCHITECT, THE ENGINEERS, AND THE DESIGN CONSULTANTS. THEY ARE NOT PREPARED AS INSTRUCTIONS TO THE CONTRACTOR FOR HOW TO BUY OUT OR SUBCONTRACT THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR ALL THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS, REGARDLESS OF WHERE IT IS SHOWN. FOR EXAMPLE, ELECTRICAL WORK IS SHOWN ON FP-SERIES DRAWINGS AS WELL AS ON M-SERIES DRAWINGS AND E-SERIES DRAWINGS. MISCELLANEOUS METALS AND STRUCTURAL ELEMENTS ARE SHOWN ON A-SERIES DRAWINGS AS WELL AS ON S-SERIES DRAWINGS. STRUCTURAL SUPPORTS ARE REQUIRED BY THE FP DRAWINGS. TO AVOID OMITTING ANY COMPONENT OF THE PROJECT, REFER TO ALL THE CONTRACT DOCUMENTS IN THEIR ENTIRETY.
- 18. WHEREVER EXISTING SYSTEMS ARE ALTERED OR EXTENDED THE INTEGRITY OF THE SYSTEM IS TO BE MAINTAINED AND FUNCTION FULLY AS BEFORE. COORDINATE SCHEDULE FOR HOOK-UPS TO EXISTING SYSTEMS AND EQUIPMENT REMOVAL OR RELOCATION WITH THE OWNER AND PERFORM THIS WORK AT SUCH TIMES TO ENSURE THAT PERIODS OF SHUTDOWN WILL BE ACCEPTABLE TO THE OWNER.
- 19. VERIFY EXACT LOCATION OF CONNECTION POINTS (NEW TO EXISTING) IN FIELD PRIOR TO CONSTRUCTION.
- 20. RELOCATE EXISTING DUCTWORK AND/OR PIPE WORK IN EXISTING CEILING SPACES TO ACCOMMODATE ALL RENOVATIONS.
- 21. TAKE DOWN AND REINSTALL EXISTING CEILINGS IN ALL AREAS WHERE MECHANICAL WORK IS INDICATED AND EXISTING CEILINGS REMAIN. REPLACE CEILING TILES DAMAGED DURING WORK.
- 22. PATCH ALL WALLS, FLOORS, CEILINGS, AND ROOFS TO MATCH EXISTING IN ALL CASES WHERE EXISTING WALLS, FLOORS, CEILINGS, AND ROOFS REMAIN AND HVAC DEMOLITION IS INDICATED.

THE WORK COMPLETE AND READY FOR OPERATION, SHALL BE PROVIDED WITHOUT ADDITIONAL COST.

5. DRAWINGS ARE DIAGRAMMATIC AND INDICATE A GENERAL ARRANGEMENT OF WORK AND ARE NOT TO

6. PERFORM THE WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT GENERAL

15. DO NOT RUN ANY MECHANICAL OR CONTROL SERVICES THROUGH RATED STAIR ENCLOSURES UNLESS

16. COORDINATE ALL ROOF AND FLOOR PENETRATIONS W/ STRUCTURAL DWGS AND PROVIDE

GENERAL	MECHANICAL SYMBOLS
CD CD G G G G	CONDENSATE DRAIN PIPING NATURAL GAS PIPING EXISTING PIPING OR DUCTWORK TO REMAIN EXISTING PIPING OR DUCTWORK TO BE REMOVED EXISTING DUCTWORK TO REMAIN (DRAWN
$\begin{bmatrix} x \\ -x \\$	EXISTING DUCTWORK TO BE REMOVED (DRAWN DOUBLE LINE)
£3	HIDDEN DUCTWORK (DRAWN DOUBLE LINE)
	SUPPLY DUCT UP / DOWN
	RETURN AIR DUCT UP / DOWN
	EXHAUST AIR DUCT UP / DOWN
24x12	DOUBLE LINE DUCTWORK WITH INDICATION OF INSIDE DIMENSIONS
	ACCESS DOOR IN DUCT
<b>6</b> 12"Ø	ROUND DUCT DIAMETER SIZE
	FLEXIBLE DUCT CONNECTION
_ <del>∪ ►</del>	UNDERCUT DOOR
<b>→</b>	SUPPLY AIR FLOW
- <b>\</b> -	EXHAUST / RETURN AIR FLOW
	MITERED ELBOW WITH TURNING VANES
	DUCT TAKE-OFF
<b>***</b> *	VANE EXTRACTOR
	GAS PLUG VALVE
$\bowtie$	CEILING DIFFUSER REFER TO SCHEDULE FOR SIZE & TYPE
	EXISTING SUPPLY DIFFUSER TO REMAIN
	RETURN / EXHAUST GRILLE REFER TO SCHEDULE FOR SIZE & TYPE
	EXISTING RETURN / EXHAUST GRILLE TO REMAIN.
<b>(</b>	THERMOSTAT
Э	RELATIVE HUMIDITY SENSOR OR HUMIDISTAT
(S)	SMOKE DETECTOR IN DUCT
SD SD	SMOKE DAMPER
FD FD	FIRE DAMPER
MD MD	MOTORIZED DAMPER
	MANUAL VOLUME DAMPER / CABLE OPERATED DAMPER (COD)
	EXISTING VOLUME DAMPER TO REMAIN.

EXISTING SHUTOFF VALVE TO REMAIN.

UNDERLINED TEXT DENOTES EQUIPMEN

REFER TO SCHEDULES

DIFFUSER LEGEND

CFM = CFM QUANTITY POINT OF CONNECTION

POINT OF DEMOLITION

\* ALL SYMBOLS MAY NOT BE USED IN THESE DOCUMENTS.

XXX

CFM-#

# MECHANICAL DEMOLITION NOTES

- THE WORK.
- A MUTUALLY AGREEABLE PERIOD OF INTERRUPTION.
- AREAS.
- OWNER'S PRIOR WRITTEN PERMISSION.
- THE NEW SYSTEMS COME ON LINE.
- REMOVED MATERIALS SHALL BE DISPOSED OF USING LICENSED CARTING SERVICE.
- HAZARDOUS MATERIALS SHALL BE DISPOSED OF BY AN EPA APPROVED, LICENSED DISPOSAL SERVICE. CONTRACTOR SHALL OBTAIN AND HAVE ON FILE, AFFIDAVIT, AND RECEIPTS STATING HOW AND WHERE THE WASTE WAS DISPOSED OF OR CONVERTED.
- CONDITIONS. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL SYSTEMS PRIOR TO COMMENCEMENT OF DEMOLITION WORK.
- IN AN APPROVED MANNER.
- INSULATION, DUCTWORK, ETC.) SHALL REMAIN.
- ENCLOSURES, ETC.

COORDINATE PHASING OF DEMOLITION WITH AGENCY, CM/GC AND PROPOSED CONSTRUCTION SCHEDULE TO MAINTAIN MECHANICAL SERVICES (HEATING, TEMPERATURE CONTROLS, EXHAUSTS, MAKE UP AIR ETC.) TO OCCUPIED AREAS OF THE BUILDING DURING CONSTRUCTION. THE EXISTING FACILITY WILL BE OCCUPIED AND IN OPERATION DURING THE PERFORMANCE OF

WHEN NECESSARY TO TEMPORARILY DISCONNECT ANY EXISTING PIPING OR DUCTWORK WHICH MAY CAUSE DISRUPTION TO OCCUPIED FACILITIES, CONFER WITH THE OWNER, AND SCHEDULE

WHERE REPLACEMENT, RELOCATION OR MODIFICATION OF EXISTING EQUIPMENT IS INDICATED, PROVIDE AND MAINTAIN ALL TEMPORARY SERVICES, CONNECTIONS, CONTROLS, AND ANY OTHER MATERIALS AND APPURTENANCES REQUIRED TO MAINTAIN SERVICES TO OCCUPIED

NO WORK SHALL BE LEFT INCOMPLETE, NOR ANY HAZARDOUS SITUATION CREATED, WHICH WILL AFFECT THE LIFE OR SAFETY OF THE PUBLIC AND/OR BUILDING OCCUPANTS. AT NO TIME SHALL THE WORK INTERFERE WITH OR CUT OFF ANY OF THE EXISTING SERVICES WITHOUT THE

THE OWNER RESERVES THE RIGHT TO OPERATE ALL EXISTING MECHANICAL EQUIPMENT UNTIL

IT IS REQUIRED THAT THE WORK INDICATED AND/OR SPECIFIED SHALL BE CARRIED OUT WITH A MINIMUM OF INTERFERENCE TO THE ESTABLISHED OPERATIONS OF THE BUILDING.

10. DUCTWORK, EQUIPMENT AND TERMINAL DEVICES HAVE BEEN TAKEN FROM FIELD OBSERVATION AND ARE TO BE USED FOR REFERENCE AND SHALL NOT BE CONSTRUED TO BE ACTUAL FIELD

ALL EQUIPMENT TO BE REMOVED SHALL BE DISPOSED OF PER OR STORED PER DIRECTION OF OWNER. ANY ITEM NOT RETAINED BY OWNER SHALL BE REMOVED FROM SITE AND DISCARDED

12. IT IS THE INTENTION OF THESE SPECIFICATION TO REMOVE ALL MATERIALS ABANDONED BY THE SCOPE OF THIS CONSTRUCTION PROJECT. NO OBSOLETE MATERIALS (I.E. HANGERS, SUPPORTS,

13. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION TO ANY EXPOSED OR UNCAPPED NEW OR EXISTING DUCTWORK TO REMAIN TO MINIMIZE DUST CONTAMINATION IN ANY AND ALL OF THE AIR SYSTEMS. THIS SHALL INCLUDE BUT IS NOT LIMITED TO TEMPORARY FILTERS, CAPS,

## MECHANICAL DRAWING LIST

DRAWING NUMBER	DRAWING DESCRIPTION
M-001	COVER SHEET - MECHANICAL
MD-103	DEMOLITION ROOF PLAN - MECHANICAL
M-101	FIRST FLOOR PLAN - MECHANICAL
M-102	SECOND FLOOR PLAN - MECHANICAL
M-103	ROOF PLAN - MECHANICAL
M-300	SCHEDULES - MECHANICAL
M-400	DETAILS - MECHANICAL

drawing ti Co M	OVER ECHA	SHEET - NICAL	STATE OF						
REVISIONS									
mark	date	description	drawing prepared by	R RONAN LLC	date 12 NOV 2018				
1	03/04/19	ADDENDUM 1	9 DA	93 LAKE AVENUE DANBURY, CT 06810					
			project DEPARTMEN	T OF MOTOR VEHICLES	drawn by JRM				
			HAMDEN 1985	I ROOF AND HVAC STATE STREET	approved by CFR				
			HA	HAMDEN, CT					
			CAD no. 18049-M-001-Cover Sheet.dwg	project no. BI-MM-54	M-001				



## AIR BALANCE NOTES

- 1. REBALANCE ALL SUPPLY AIR DIFFUSERS TO VALUES SHOWN ON FLOOR PLAN.
- 2. BALANCE OUTSIDE AIR AND RETURN AIR MAIN PROVIDED IN ROOF TOP UNIT SCHEDULE.

## SUPPLEMENTAL BID #2

INTERNALLY CLEAN ALL DUCTWORK, DAMPERS, AND TURNING VANES PRIOR TO ADJUSTING AND BALANCING. THOROUGHLY CLEAN ALL EXISTING REGISTERS, GRILLES, AND DIFFUSERS. REFER TO SPECIFICATION 230130.51 FOR DETAILED CLEANING REQUIREMENTS.

 EXISTING 36x16 RETURN UP TO RTU-7 TO REMAIN.

- EXISTING 36x16 SUPPLY UP TO RTU-7 TO REMAIN.

- REMOVE EXISTING THERMOSTAT AND REPLACE WITH NEW STAND ALONE COMBINATION THERMOSTAT/HUMIDISTAT. REMOVE AND REPLACE CONTROL WIRING.

drawing title

F M	RST F ECHA	-LOOR PLAN - NICAL	STATE OF DEPARTMENT OF A	UT	
	REV	ISIONS			
mark	date	description	drawing prepared by	R RONAN LLC	date 12 NOV 2018
1	03/04/19	ADDENDUM 1	9 DA	scale AS NOTED	
			project DEPARTMEN	drawn by _ES JRM	
			HAMDEN 1985 :	ROOF AND HVAC	approved by CFR
			HA	AMDEN, CT	drawing no.
			CAD no. 18049-M-101-First Floor Plan.dwg	project no. BI-MM-54	M-101



## AIR BALANCE NOTES

. REBALANCE ALL SUPPLY AIR DIFFUSERS TO VALUES SHOWN ON FLOOR PLAN.

2. BALANCE OUTSIDE AIR AND RETURN AIR MAIN PROVIDED IN ROOF TOP UNIT SCHEDULE.

## SUPPLEMENTAL BID #1

REMOVE AND REPLACE ALL EXISTING DUCT MOUNTED SMOKE DETECTORS FOUND ON SECOND FLOOR. RECONNECT TO EXISTING FIRE ALARM SYSTEM.

## SUPPLEMENTAL BID #2

INTERNALLY CLEAN ALL DUCTWORK, DAMPERS, AND TURNING VANES PRIOR

REGISTERS, GRILLES, AND DIFFUSERS. REFER TO SPECIFICATION 230130.51

TO ADJUSTING AND BALANCING. THOROUGHLY CLEAN ALL EXISTING

FOR DETAILED CLEANING REQUIREMENTS.

EXISTING 36X16 RTU-7 RETURN
 UP AND DOWN TO TO REMAIN.
 EXISTING 36X16 RTU-7 SUPPLY
 UP AND DOWN TO REMAIN.

- REMOVE EXISTING 1" GAS SHUT OFF VALVE AND REPLACE WITH NEW 1-1/2" GAS SHUT OFF VALVE.

AND REPLACE WITH NEW 1-1/2" GAS. RUN NEW 1-1/2" GAS TO UNIT CONNECTION.

EXISTING 1" GAS UP TO RTU-6.

 REMOVE EXISTING THERMOSTAT AND PROVIDE NEW STAND ALONE COMBINATION THERMOSTAT/HUMIDISTAT. REMOVE AND REPLACE CONTROL WIRING.

drawing title

SECON PLAN -	ID FLOOR MECHANICAL	STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES							
REV	ISIONS								
mark date	description	drawing prepared by KOHLER RONAN, LLC	date 12 NOV 2018						
1 03/04/19	ADDENDUM 1	93 LAKE AVENUE DANBURY, CT 06810	scale AS NOTED						
		DEPARTMENT OF MOTOR VEHICLES	drawn by JRM						
		HAMDEN ROOF AND HVAC 1985 STATE STREET	approved by CFR						
		HAMDEN, CT	drawing no.						
		CAD no. project no. 18049-M-102-Second Floor Plan.dwg BI-MM-54	M-102						

# HVAC PIPING/TUBING MATERIAL, JOINTS & FITTINGS

SYSTEM	PIPE SIZE	CONSTRUCTION	PIPING	FITTINGS	UNIONS	FLANGES
COOLING COIL CONDENSATE DRAINS	2" AND SMALLER	SOLDER JOINT CONSTRUCTION WITH THREADED ADAPTERS AS REQUIRED. 95-5 TIN/ANTIMONY SOLDER.	COPPER, TYPE L, HARD DRAWN, ANSI H23.1, ASTM B88.	CAST BRONZE OR WROUGHT COPPER, SOLDER ENDS, ANSI B16.9 OR ANSI B16.22.	BRONZE SOLDER ENDS, GROUND JOINTS, ANSI B16.19 OR ANSI B16.22.	USE UNIONS
NATURAL GAS	2" AND SMALLER	THREADED CONSTRUCTION WITH THREADED CONNECTIONS TO EQUIPMENT AS REQUIRED.	BLACK STEEL, SCHEDULE 40, SEAMLESS, ASTM A53, GRADE B.	MALLEABLE IRON THREADED, CLASS 150	MALLEABLE IRON, CLASS 150, THREADED ENDS, GROUND JOINTS, ANSI B16.49, ASTM A181_GRADE 1	-
ABOVE GROUND STORM DRAIN	ALL	SERVICE WEIGHT CAST IRON PIPES AND FITTINGS CONNECTED WITH NO HUB HEAVY DUTY 4-BAND CLAMPS	SERVICE WEIGHT CAST IRON PIPING	ICE WEIGHT CAST IRON PIPING SERVICE WEIGHT CAST IRON FITTINGS		8



ROOFTOP UNIT FLOW AND CONTROL DIAGRAM M-300 / SCALE: NONE

HARD WIRED. ETR UNDER BASE BID. CONNECT TO NEW UNIT

## DUCT PRESSURE CLASS

## APPLICATION

SUPPLY / RETURN AIR DUCTWORK

- LEAKAGE CLASS SHALL BE DETERMINED PER ASHRAE 90.1-2010 REQUIREMENTS. PRESSURE CLASS SHALL BE DEFINED PER SMACNA THIRD EDITION - 2015. 3. DUCTWORK, JOINTS, SEALING, AND FITTINGS SHALL BE CONSTRUCTED IN ACCORDANCE
- WITH SMACNA THIRD EDITION 2015.

# ROOF TOP AIR HANDLING UNITS

ПΤ					SUP	PLY FA	N SECT	ION				ELE	CTRI	CAL					DX C	OOLING	COIL					IND	IRECT G/	AS FIRED HEAT	TER			
$\cap$	LOCATION	SERVES	CFM	TOTAL	TOTAL	EXT.		FAN	FAN	BHP	нр		ЬН		MOCP	CAP	EA	<b>Υ</b>	L	AT	OUTDOOR	FER	VEL	CAP	MBH	AIR D	DATA	GAS	O.A.	EFFICIENCY	FILTER	MAKE/MODEL
<u> </u>				CFM	SP	SP		RPM	QTY	EACH		VOLIO	1 1 1			MBH	DB	WB	DB	WB	AIR TEMP.		FPM	IN	OUT	EAT	LAT	PRESSURE	TEMP.	EFFICIENCE		
U-1	ROOFTOP	SECOND FLOOR	450	3,000	1.04"	0.75"	BELT	893	1	1.61	3	208	3	41	50	<u>91 T</u> 68 S	77.0°F	64.1°F	56.0°F	53.8°F	88°F DB 73°F WB	12.0	500 MAX	<u>120</u> 180	<u>98</u> 148	60.7°F	106.1°F	5"	8°F	82%	MERV 13	CARRIER 48HCEE08J2M5-2FGM0
U <b>-</b> 2	ROOFTOP	SECOND FLOOR	450	3,000	1.04"	0.75"	BELT	893	1	1.61	3	208	3	41	50	<u>91 T</u> 68 S	77.0°F	64.1°F	56.0°F	53.8°F	88°F DB 73°F WB	12.0	500 MAX	<u>120</u> 180	<u>98</u> 148	60.7°F	106.1°F	5"	8°F	82%	MERV 13	CARRIER 48HCEE08J2M5-2FGM0
U-3	ROOFTOP	SECOND FLOOR	450	3,000	1.04"	0.75"	BELT	893	1	1.61	3	208	3	41	50	<u>91 T</u> 68 S	77.0°F	64.1°F	56.0°F	53.8°F	88°F DB 73°F WB	12.0	500 MAX	<u>120</u> 180	<u>98</u> 148	60.7°F	106.1°F	5"	8°F	82%	MERV 13	CARRIER 48HCEE08J2M5-2FGM0
U <b>-</b> 4	ROOFTOP	FIRST FLOOR	800	4,200	1.4"	0.85"	BELT	1127	1	3.75	5	208	3	54	60	<u>118 T</u> 90 S	77.5°F	64.5°F	57.7°F	55.1°F	88°F DB 73°F WB	12.0	500 MAX	<u>180</u> 224	<u>147</u> 184	58.2°F	98.6°F	5"	8°F	82%	MERV 13	CARRIER 48HCEE11J2M5-2FGM0
U-5	ROOFTOP	FIRST FLOOR	800	4,040	1.25"	0.85"	BELT	1073	1	3.24	5	208	3	54	60	<u>118 T</u> 90 S	77.6°F	64.6°F	57.0°F	54.8°F	88°F DB 73°F WB	12.0	500 MAX	<u>180</u> 224	<u>147</u> 184	57.8°F	99.8°F	5"	8°F	82%	MERV 13	CARRIER 48HCEE11J2M5-2FGM0
U-6	ROOFTOP	SECOND FLOOR	450	3,000	1.04"	0.75"	BELT	893	1	1.61	3	208	3	41	50	<u>91 T</u> 68 S	77.0°F	64.1°F	56.0°F	53.8°F	88°F DB 73°F WB	12.0	500 MAX	<u>120</u> 180	<u>98</u> 148	60.7°F	106.1°F	5"	8°F	82%	MERV 13	CARRIER 48HCEE08J2M5-2FGM0
U-7	ROOFTOP	FIRST FLOOR	800	4,200	1.4"	0.85"	BELT	1127	1	3.75	5	208	3	54	60	<u>118 T</u> 90 S	77.5°F	64.5°F	57.7°F	55.1°F	88°F DB 73°F WB	12.0	500 MAX	<u>180</u> 224	<u>147</u> 184	58.2°F	98.6°F	5"	8°F	82%	MERV 13	CARRIER 48HCEE11J2M5-2FGM0

6. INTAKE PLENUM AND COIL SECTIONS SHALL HAVE SOLID LINER. FILTER, ACCESS AND FAN SECTIONS SHALL HAVE PERFORATED LINER. 7. FURNISH EACH ROOFTOP UNIT WITH A 7 DAY PROGRAMMABLE COMBINATION THERMOSTAT / HUMIDISTAT WITH DIGITAL BACKLIT DISPLAY BY ROOFTOP UNIT

MANUFACTURER. THERMOSTATIC CONTROLS SHALL HAVE AN ADJUSTABLE DEADBAND ORIGINALLY SET TO 5°F, AND SHALL PERMANENTLY RETAIN THEIR

8. FOR EACH ROOFTOP UNIT: PROVIDE 2 STAGE GAS FIRED FURNACE AND 2 SPEED VFD FURNISHED BY MANUFACTURER.

	HVAC VIBRATION	N-CONTROL	HVAC DUCT/PLENUM INSULATION							
EQUIPMENT BASE		ISOLATOR	DEFLECTION	SYSTEM	INSULATION TYPE	MINIMUM INSTALLED	NOMINAL			
ROOF MOUNTED AIR HANDLING UNITS	ADAPTOR CURB ON EXISTING ROOF CURB	-	_			INSULATION VALUES	DENSITY			
REMARKS: 1. REFER TO SPECIFICATION SECTION 237413 - "PACKAGED OUTD 2. SEISMIC ANCHORS, SUPPORTS AND BRACING EQUIPMENT SHA ENGINEER IN THE STATE OF THE PROJECT INDICATING ALL NEW 2. DROVIDE SUBPLEMENTAL STEEL WITHIN THE POOL CURP TO S	DOOR CENTRAL AIR HANDLING UNITS" FOR A D ALL BE PROVIDED. THE DESIGN OF ALL COMPO CESSARY COMPONENT CUT SHEETS, PLAN LC	ESCRIPTION OF ROOF AND ADAPTOR NENTS SHALL BE SUBMITTED SIGNED ICATIONS AND CALCULATIONS FOR A	ABOVEGROUND, OUTDOOR DUCT/PLENUM CONCEALED OR EXPOSED SA AND RA	MINERAL FIBER BOARD (REFER TO NOTE #1)	2" R-8	3 LB/FT <sup>3</sup>				
5. PROVIDE SUPPLEMENTAL STELL WITHIN THE ROOF GURB TO S				INDOOR DUCT/PLENUM	MINERAL FIBER BLANKET	2" R-6.0	3/4 LB/FT <sup>3</sup>			
				CONCEALED SA AND RA:	MINERAL FIBER BOARD WITH REFLECTIVE VAPOR BARRIER.	2" R-6.0	3 LB/FT <sup>3</sup>			
				<ol> <li>ALL DUCTWORK INSTALLED OUTDOOR: PROVID RESISTANT, STUCCO EMBOSSED FACING. WATE BE .020 PERMS OR LESS. PRODUCT SHALL BE S -10°F. MANUFACTURERS SHALL BE SIMILAR TO ALUMAGUARD 60, POLYGUARD PRODUCTS, INC</li> </ol>	E A PRE-MANUFACTURED SELF ADHERING PE ER VAPOR TRANSMISSION OF THE INSTALLED SUITABLE FOR CONTINUOUS USE IN LOW TEM FLEX-CLAD 400, MFM BUILDING PRODUCTS CO	RODUCT WITH AN UV PRODUCT SHALL IPERATURES OF ORP. OR				

VALVE SCHEDULE											
TYPE								ABBREVIATIONS			
DESCRIPTION	SIZE	GATE	GLOBE	CHECK	BALL	PLUG	BALAN.	CLASS	REMARKS	ABB.	DESCRIPTION
GAS	2" AND SMALLER					PGVT		125 PSI	<b></b>	PGVT	LOCKABLE PLUG VALVE THREADED - AGA APPROVED

PLUMBING DRAIN SCHEDULE								
DRAIN TAG	DRAIN TYPE	DRAIN MANUFACTURER MODEL, MODEL NO.	MATERIAL	DESCRIPTION	TRAP SIZE	REMARKS		
D1	ROOF DRAIN	FROET 200C SERIES WADE 3011 SERIES WATTS RD-300-F	CAST IRON	HEAVY DUTY DRAIN WITH 13"-15" DIAMETER CAST IRON BODY, BOTTOM OUTLET, 12" DIAMETER CAST IRON DOME, ROOF SUMP RECEIVER, UNDER DECK CLAMP, EXTENSION, AND COMBINATION MEMBRANE FLASHING CLAMP/GRAVEL GUARD.	NO TRAP	NOTE: INCLUDE EXTENSION COLLAR AS REQUIRED FOR INSTALLATION OR CONSTRUCTION THICKNESS. MATCH DRAIN TO EXISTING PIPE SIZE		

PRESSURE CLASS

2" W.G.

# HVAC DUCT/PLENUM MATERIAL

APPLICATION

TYPICAL

SUPPLY G90 GALVANIZED G90 GALVANIZED

RETURN

EXHAUST

-

(UNLESS OTHERWISE SPECIFIED)

STEEL STEEL

1. DUCT CONSTRUCTION SHALL MEET SMACNA METAL & FLEXIBLE 2005 3RD EDITION STANDARDS.

2. INSULATION TYPES INDICATED IN THE SCHEDULE SHALL BE USED UNLESS OTHERWISE INDICATED ON THE PLANS OR SPECIFICATIONS.

SA = SUPPLY AIR DUCTWORK RA = RETURN AIR DUCTWORK

drawing title SCHEDULES - MECHANICAL REVISIONS			STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES			
mark	date	description			date 12 NOV 2018	
1	03/04/19	ADDENDUM 1	9 DA	scale NO SCALE		
			DEPARTMENT OF MOTOR VEHICLES		drawn by JRM	
			HAMDEN 1985	approved by CFR		
			H	drawing no.		
			CAD no. 18049-M-300-Schedules.dwg	project no. BI-MM-54	M-300	



DI M	ETAIL ECHA	S - NICAL	STATE OF CONNECTICUT DEPARTMENT OF ADMINISTRATIVE SERVICES		
	REV	/ISIONS			
mark	date	description	drawing prepared by KOHLER RONAN, LLC 93 LAKE AVENUE DANBURY, CT 06810		date 12 NOV 2018
1 03/04	03/04/19	ADDENDUM 1			scale N.T.S.
			project DEPARTMEN	drawn by JRM	
			HAMDEN ROOF AND HVAC 1985 STATE STREET HAMDEN, CT		approved by CFR
					drawing no.
			CAD no. 18049-M-400-Details.dwg	project no. BI-MM-54	M-400
					-