

MECHANICAL GENERAL NOTES:

[illegible]

7. THE INTENT OF THESE DOCUMENTS IS THE MAXIMIZATION OF THE VALUE OF ALL ASSETS, EQUIPMENT AND TOOLS FOR THE COMPLETE RESOLUTION OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ASSETS, EQUIPMENT AND TOOLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ASSETS, EQUIPMENT AND TOOLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ASSETS, EQUIPMENT AND TOOLS.
8. SHOULD DOCUMENTS NECESSARY FOR THE PERFORMANCE OF ANY SYSTEMS ANALYSIS OR RISK ASSESSMENT, REPAIR AND/OR MAINTENANCE, BE REQUIRED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ASSETS, EQUIPMENT AND TOOLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ASSETS, EQUIPMENT AND TOOLS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ASSETS, EQUIPMENT AND TOOLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ASSETS, EQUIPMENT AND TOOLS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ASSETS, EQUIPMENT AND TOOLS.

10. CONTRACTOR SHALL PURCHASE AND INSTALL A COMPLETE TEMPERATURE CONTROL SYSTEMS SPECIFIED AND AS REQUIRED TO FULLY INTEGRATE WITH ALL EXISTING AND NEW EQUIPMENT AND SYSTEMS AS WELL AS THE EXISTING BAS.
11. ALLOWANCES SHALL BE DONE IN ACCORDANCE WITH ALL APPROPRIATE AGENCY GUIDELINES/ MANUALS, CURRENT FEDERAL BUILDING CODES, REGULATIONS, AND REQUIREMENTS, LOCAL UTILITY COMPANY REQUIREMENTS, AND AIA/AS AIA'S REGULATIONS.
12. CONTRACTOR SHALL PAY ALL PERMIT FEES. PLAN THE NEW FEES, LICENSE, TEST INSPECTIONS, AND ALL RELATED EXPENSES (AFTER A "PERMITS/INSPECTIONS" SECTION IN THE PROJECT). ALL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY CONTRACTS AS IDENTIFIED AND COORDINATED WITH THE GENERAL PRIME CONTRACTOR.
13. CONTRACTOR SHALL BE LICENSED, BONDED, AND HAVE A RECORD OF PERFORMANCE BY WORKING WITH A CONTRACTOR'S BUREAU OF STANDARDS, AND INTERNAL FOR THE PERIODS REQUIRED IN THE SPECIFICATIONS IN ORDER TO RECEIVE FINAL ACCEPTANCE BY THE AIA/AS AIA.


14. CONTRACTOR SHALL FOLLOW THE FOLLOWING WORKING PROCEDURES FOR THE PROTECTION OF THEIR PERSONNEL AND OTHERS THROUGHOUT ALL PHASES OF THEIR WORK. THEY SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL LAWS, ORDINANCES AND REGULATIONS RELATING TO OCCUPATIONAL SAFETY AND HEALTH AND AS RECOMMENDED IN THE MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION ISSUED BY THE ASSOCIATION OF GENERAL CONTRACTORS OF AMERICA, 20TH AND E STREETS, N.W., WASHINGTON, D.C., LATEST EDITION.

	Date
100% SCHEMATIC DESIGN DEVELOPMENT	05/24/2020
90% SCHEMATIC DESIGN DEVELOPMENT	09/11/2020
80% DESIGN DEVELOPMENT	09/11/2021
95% CONSTRUCTION DOCUMENTS SUBMISSION	07/23/2021
100% CONSTRUCTION DOCUMENTS SUBMISSION	11/24/2021
100% CONSTRUCTION DOCUMENTS SUBMITTAL	

1
2

MECHANICAL SYMBOLS AND ABBREVIATIONS

[illegible]

 U.S. Department of Veterans Affairs	Office of Construction and Facilities Management	Drawing No. MECHANICAL - GENERAL NOTES, SYMBOLS AND ASSOCIATIONS	Phase BID DOCUMENT'S SUBMITTAL	Project RE	VA
		Approved: Project Director		Location Metro Value	

Age Group	Percentage of Respondents
18-29	85%
30-49	80%
50-69	75%
70+	70%

VA CONTRACT NO: 36C24519C0171

Location MARTINSBURG VA MEDICAL CENTER	Drawing Number 613-19-500
Issue Date 11/24/2021	Drawn By RRR
Checked By RAR	M

BID DOCUMENTS SUBMITTED
FULLY SPRINKLERED

MECHANICAL - GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

Approved: Project Director

ACCEPTED MANUSCRIPT

Office of
Construction
and Facilities
Management

15 JULY 2004

STAMP	
	<p>Indes Blvd., Suite 300 Five Village, L 6000 Dallas, TX 75243 USA. F 947.932-4933 www.boncroff.de.com</p>

PROJECT/ENGINEER OF RECORD

Bancroft

7000
18th
T: 647.29

SOFT ARCHITECTS + ENGINEERS

1

ARCHITECT	
BANK	

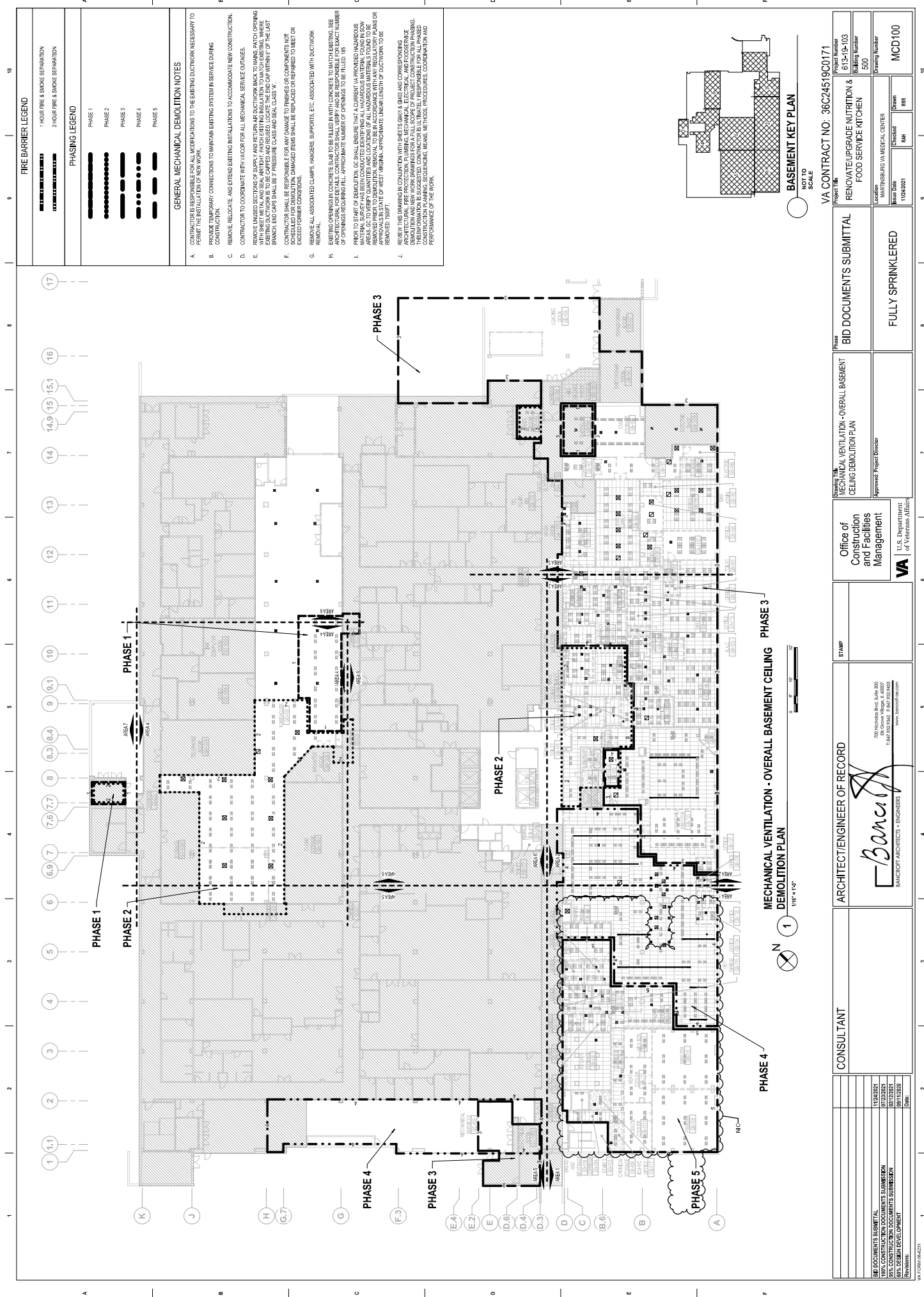
15 JULY 2005

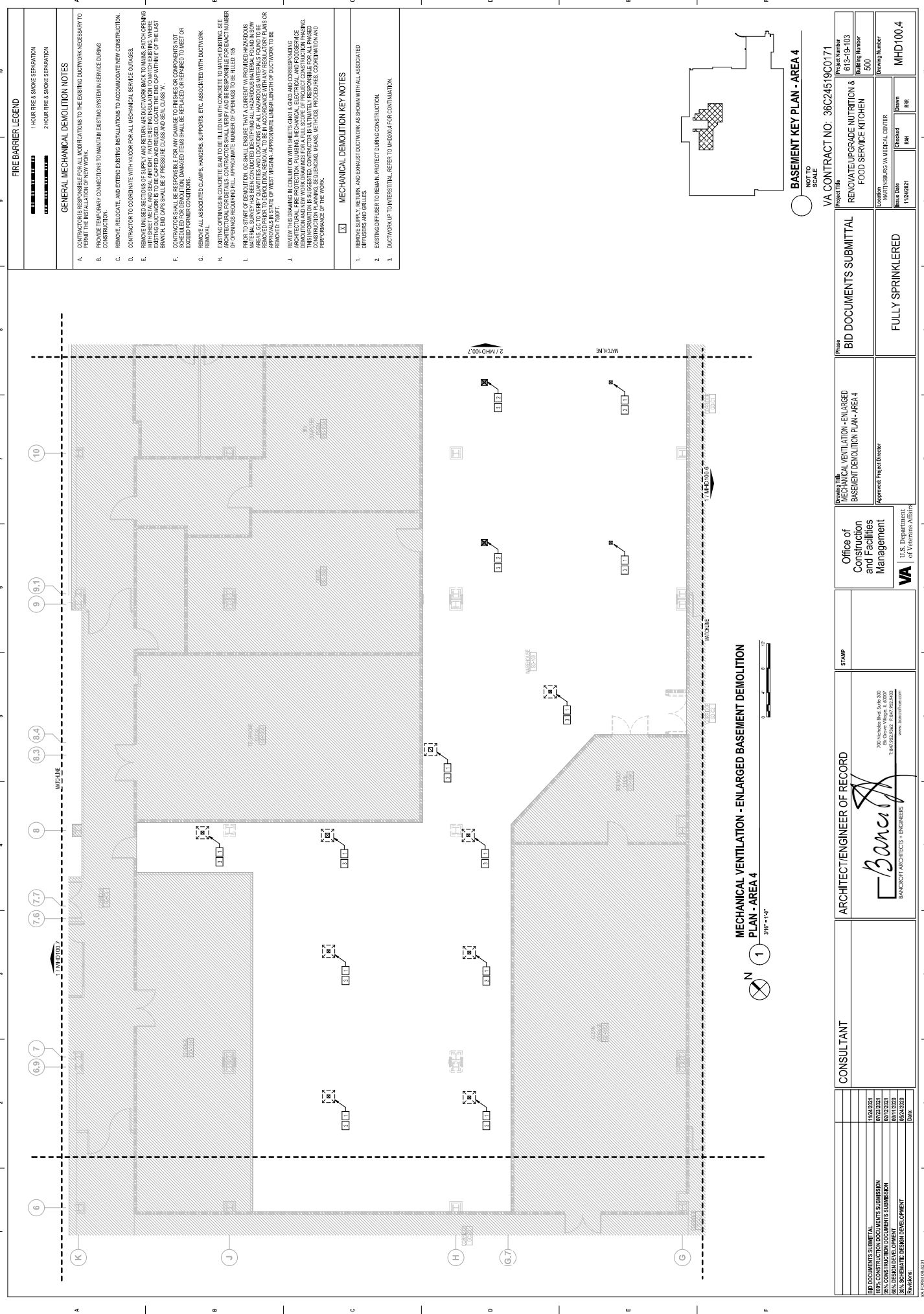
CONSULTA	
	11/24/2021
	07/23/2021
	02/12/2021
	09/11/2020
	05/24/2020
	Date:

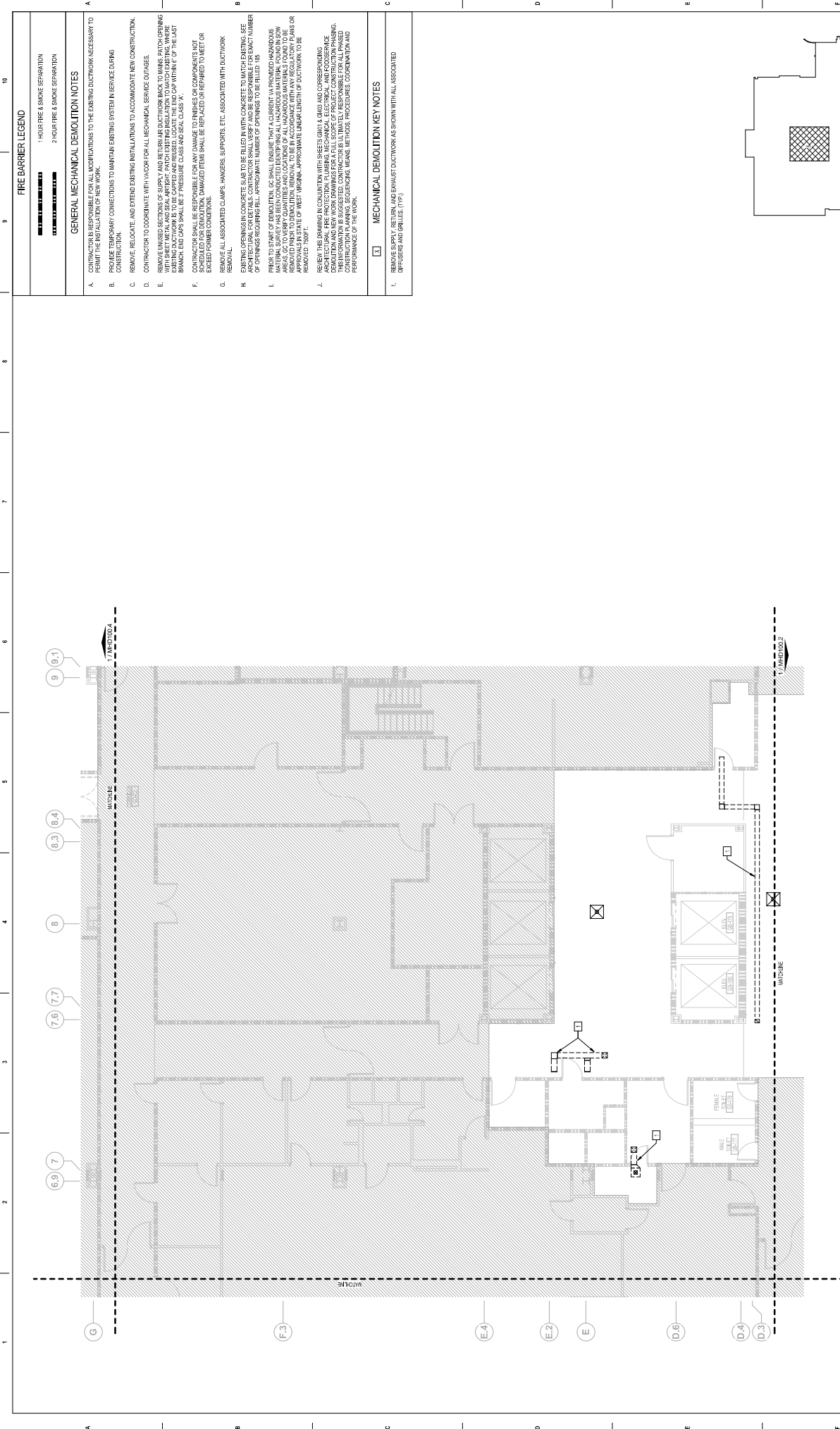
15 JULY 2005

BID DOCUMENTS SUBMITTAL
 100% CONSTRUCTION DOCUMENTS SUBMISSION
 95% CONSTRUCTION DOCUMENTS SUBMISSION
 60% DESIGN DEVELOPMENT
 30% SCHEMATIC DESIGN DEVELOPMENT
 Revisions:

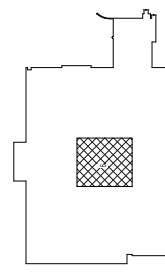
1276201

[illegible]



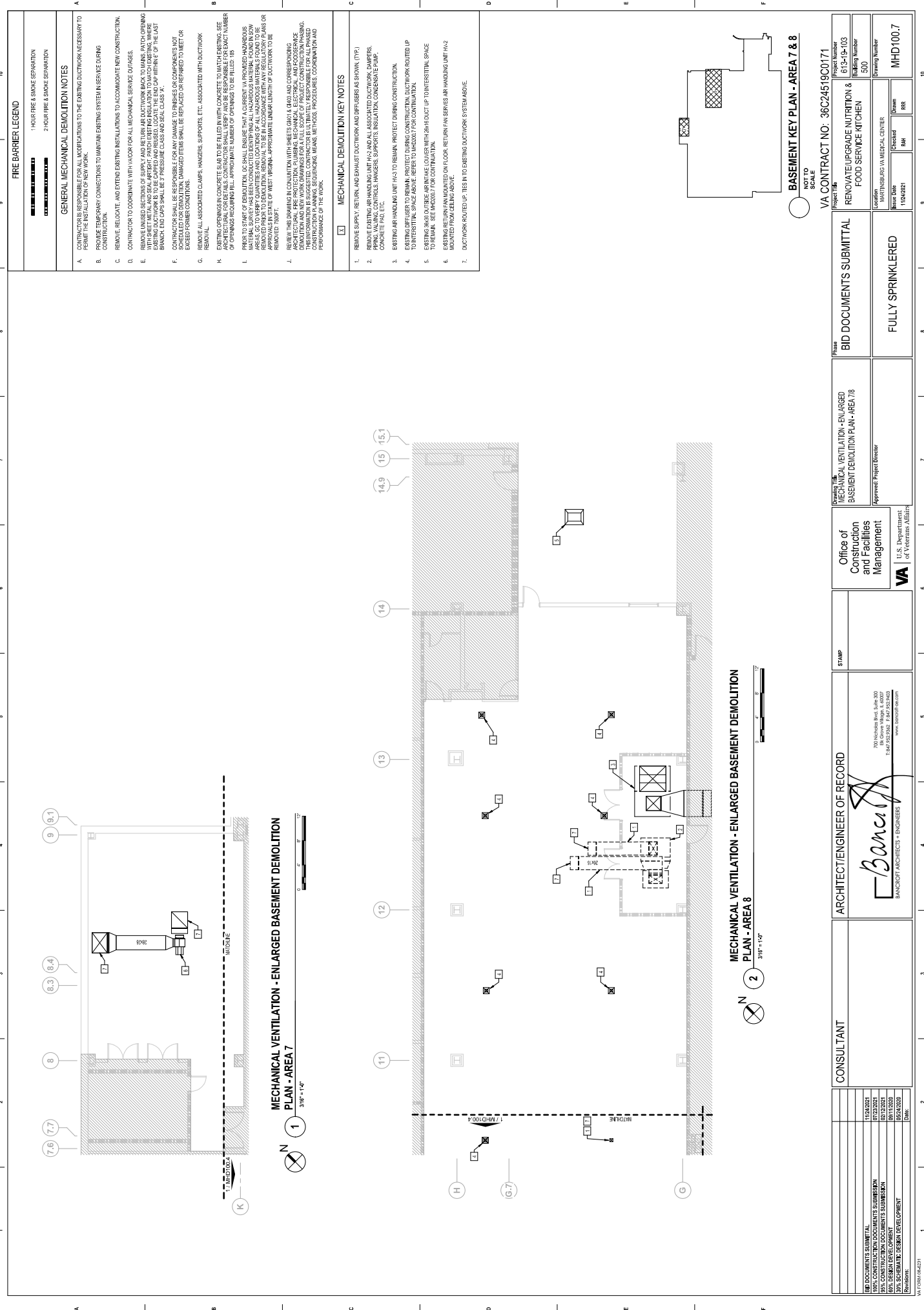


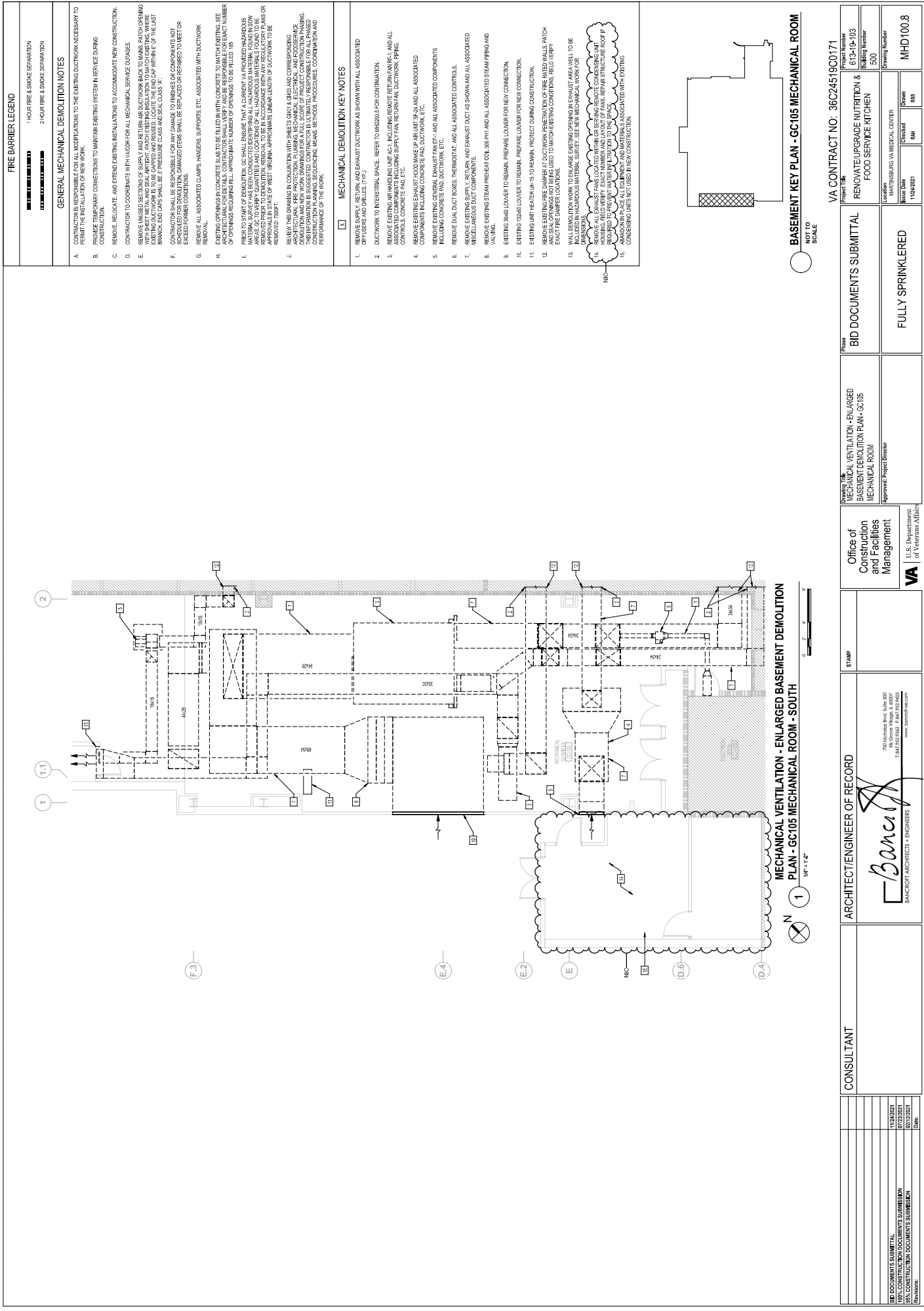
**MECHANICAL VENTILATION - ENLARGED BASEMENT DEMOLITION
PLAN - AREA 6**



BASEMENT KEY PLAN - AREA 6

[illegible]





FIRE BARRIER LEGEND	
1 HOUR FIRE & SMOKE SEPARATION	2 HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL DEMOLITION NOTES	
A. CONTRACTOR IS RESPONSIBLE FOR ALL APPLICATIONS TO THE EXISTING DUCTWORK NECESSARY TO PERMIT THE INSTALLATION OF NEW WORK.	
B. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEM IN SERVICE DURING CONSTRUCTION.	
C. REMOVE, REDUCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.	
D. CONNECTION TO COORDINATE WITH HOOKS FOR ALL MECHANICAL SERVICE OUTAGES.	
E. REMOVE UNFINISHED SECTIONS OF SUPPLY AND RETURN AIR DUCTWORK BACK TO MAINS PATCH OPENING. EXISTING DUCTWORK IS TO BE CAPPED AND REUSED. LOCATE THE END CAP WITHIN 6" OF THE LAST BRANCH. END CAPS SHALL BE 2" PRESSURE CLASS AND SEAL CLASS A.	
F. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FINISHES OR COMPONENTS NOT IDENTIFIED IN THIS DEMOLITION PLAN. DAMAGED ITEMS SHALL BE REPAIR OR REPAIRED TO MEET OR EXCEED FORMER CONDITIONS.	
G. REMOVE ALL ASSOCIATED CLAMPS, HANGERS, SUPPORTS, ETC. ASSOCIATED WITH DUCTWORK REMOVAL.	
H. EXISTING OPENINGS IN CONCRETE ARE TO BE FILLED IN WITH CONCRETE TO MATCH EXISTING. SEE ARCHITECTURAL FOR DETAILS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR EXACT NUMBER AND LOCATION OF ALL EXISTING OPENINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL EXISTING OPENINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL EXISTING OPENINGS.	
I. PRIOR TO START OF DEMOLITION, CONTRACTOR SHALL PREPARE A CURTAIN WALL DEMOLITION MATERIAL SURVEY HAS BEEN CONDUCTED IDENTIFYING ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS.	
J. REVIEW THE DRAWING IN CONJUNCTION WITH SHEETS G101 & G102 AND CORRESPONDING DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THE INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THE INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING.	
MECHANICAL DEMOLITION KEY NOTES	
1. REMOVE SUPPLY, RETURN, AND EXHAUST DUCTWORK AS SHOWN WITH ALL ASSOCIATED DIFFUSERS AND GRILLES, (TYP).	
2. DUCTWORK TO INTERSTITIAL SPACE. REFER TO H4000S FOR CONTINUATION.	
3. REMOVE EXISTING AIR HANDLING UNIT (S), INCLUDING REMOTE RETURN FAN(S) AND ALL ASSOCIATED COMPONENTS INCLUDING SUPPLY FAN, RETURN FAN, DUCTWORK, PIPING, CONTROLS, CONCRETE PAV, ETC.	
4. REMOVE EXISTING EXHAUST HOOD MAKE UP AIR UNIT (S) AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
5. REMOVE EXISTING GENERAL EXHAUST FAN (S) - AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
6. REMOVE EXISTING DUCT EXHAUST, THERMOSTAT, AND ALL ASSOCIATED CONTROLS.	
7. REMOVE EXISTING SUPPLY, RETURN, AND EXHAUST DUCT AS SHOWN AND ALL ASSOCIATED MISCELLANEOUS DUCT COMPONENTS.	
8. REMOVE EXISTING STEAM PREHEAT COIL, 500-RPH, AND ALL ASSOCIATED STEAM PIPING AND MISCELLANEOUS DUCT COMPONENTS.	
9. EXISTING 36" DIAM LOUVER TO REMAIN. PREPARE LOUVER FOR NEW CONNECTION.	
10. EXISTING 12" DIAM LOUVER TO REMAIN. PREPARE LOUVER FOR NEW CONNECTION.	
11. EXISTING UNIT HEATER (H-15) TO REMAIN. PROTECT DURING CONSTRUCTION.	
12. REMOVE EXISTING FIRE DAMPER AT DUCTWORK PENETRATION OF FIRE RATED WALLS PATCH AND SEAL OPENINGS NOT BEING USED TO MATCH EXISTING CONDITIONS. FIELD VERIFY EXACT FIRE DAMPER LOCATION.	
13. REMOVE EXISTING EXHAUST HOOD MAKE UP AIR UNIT (S) AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
14. REMOVE ALL EXHAUST FANS LOCATED WITHIN OF SERVING REMOTE CONDENSING UNIT HOUSING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING.	
15. CONDENSING UNITS NOT USED IN NEW CONSTRUCTION.	

BASEMENT KEY PLAN - GC105 MECHANICAL ROOM	
NOT TO SCALE	

MECHANICAL VENTILATION - ENLARGED BASEMENT DEMOLITION PLAN - GC105 MECHANICAL ROOM - SOUTH	
1/4" = 1'-0"	

FIRE BARRIER LEGEND	
1 HOUR FIRE & SMOKE SEPARATION	2 HOUR FIRE & SMOKE SEPARATION

GENERAL MECHANICAL DEMOLITION NOTES	
A. CONTRACTOR IS RESPONSIBLE FOR ALL APPLICATIONS TO THE EXISTING DUCTWORK NECESSARY TO PERMIT THE INSTALLATION OF NEW WORK.	
B. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEM IN SERVICE DURING CONSTRUCTION.	
C. REMOVE, REDUCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.	
D. CONNECTION TO COORDINATE WITH HOOKS FOR ALL MECHANICAL SERVICE OUTAGES.	
E. REMOVE UNFINISHED SECTIONS OF SUPPLY AND RETURN AIR DUCTWORK BACK TO MAINS PATCH OPENING. EXISTING DUCTWORK IS TO BE CAPPED AND REUSED. LOCATE THE END CAP WITHIN 6" OF THE LAST BRANCH. END CAPS SHALL BE 2" PRESSURE CLASS AND SEAL CLASS A.	
F. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FINISHES OR COMPONENTS NOT IDENTIFIED IN THIS DEMOLITION PLAN. DAMAGED ITEMS SHALL BE REPAIR OR REPAIRED TO MEET OR EXCEED FORMER CONDITIONS.	
G. REMOVE ALL ASSOCIATED CLAMPS, HANGERS, SUPPORTS, ETC. ASSOCIATED WITH DUCTWORK REMOVAL.	
H. EXISTING OPENINGS IN CONCRETE ARE TO BE FILLED IN WITH CONCRETE TO MATCH EXISTING. SEE ARCHITECTURAL FOR DETAILS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR EXACT NUMBER AND LOCATION OF ALL EXISTING OPENINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL EXISTING OPENINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL EXISTING OPENINGS.	
I. PRIOR TO START OF DEMOLITION, CONTRACTOR SHALL PREPARE A CURTAIN WALL DEMOLITION MATERIAL SURVEY HAS BEEN CONDUCTED IDENTIFYING ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS.	
J. REVIEW THE DRAWING IN CONJUNCTION WITH SHEETS G101 & G102 AND CORRESPONDING DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THE INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THE INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING.	

MECHANICAL DEMOLITION KEY NOTES	
1. REMOVE SUPPLY, RETURN, AND EXHAUST DUCTWORK AS SHOWN WITH ALL ASSOCIATED DIFFUSERS AND GRILLES, (TYP).	
2. DUCTWORK TO INTERSTITIAL SPACE. REFER TO H4000S FOR CONTINUATION.	
3. REMOVE EXISTING AIR HANDLING UNIT (S), INCLUDING REMOTE RETURN FAN(S) AND ALL ASSOCIATED COMPONENTS INCLUDING SUPPLY FAN, RETURN FAN, DUCTWORK, PIPING, CONTROLS, CONCRETE PAV, ETC.	
4. REMOVE EXISTING EXHAUST HOOD MAKE UP AIR UNIT (S) AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
5. REMOVE EXISTING GENERAL EXHAUST FAN (S) - AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
6. REMOVE EXISTING DUCT EXHAUST, THERMOSTAT, AND ALL ASSOCIATED CONTROLS.	
7. REMOVE EXISTING SUPPLY, RETURN, AND EXHAUST DUCT AS SHOWN AND ALL ASSOCIATED MISCELLANEOUS DUCT COMPONENTS.	
8. REMOVE EXISTING STEAM PREHEAT COIL, 500-RPH, AND ALL ASSOCIATED STEAM PIPING AND MISCELLANEOUS DUCT COMPONENTS.	
9. EXISTING 36" DIAM LOUVER TO REMAIN. PREPARE LOUVER FOR NEW CONNECTION.	
10. EXISTING 12" DIAM LOUVER TO REMAIN. PREPARE LOUVER FOR NEW CONNECTION.	
11. EXISTING UNIT HEATER (H-15) TO REMAIN. PROTECT DURING CONSTRUCTION.	
12. REMOVE EXISTING FIRE DAMPER AT DUCTWORK PENETRATION OF FIRE RATED WALLS PATCH AND SEAL OPENINGS NOT BEING USED TO MATCH EXISTING CONDITIONS. FIELD VERIFY EXACT FIRE DAMPER LOCATION.	
13. REMOVE EXISTING EXHAUST HOOD MAKE UP AIR UNIT (S) AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
14. REMOVE ALL EXHAUST FANS LOCATED WITHIN OF SERVING REMOTE CONDENSING UNIT HOUSING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING.	
15. CONDENSING UNITS NOT USED IN NEW CONSTRUCTION.	

BASEMENT KEY PLAN - GC105 MECHANICAL ROOM	
NOT TO SCALE	

MECHANICAL VENTILATION - ENLARGED BASEMENT DEMOLITION PLAN - GC105 MECHANICAL ROOM - SOUTH	
1/4" = 1'-0"	

FIRE BARRIER LEGEND	
1 HOUR FIRE & SMOKE SEPARATION	2 HOUR FIRE & SMOKE SEPARATION

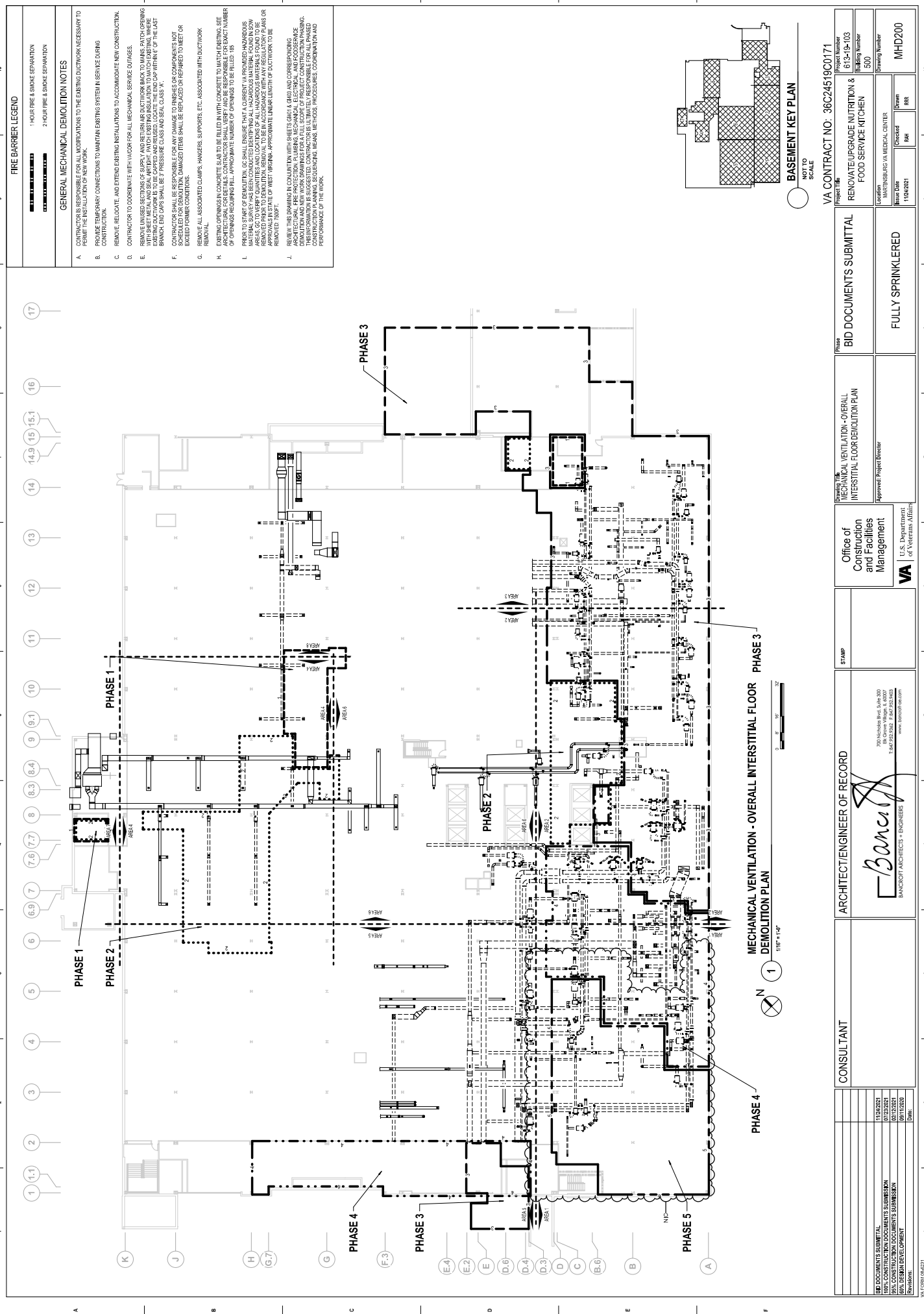
GENERAL MECHANICAL DEMOLITION NOTES	
A. CONTRACTOR IS RESPONSIBLE FOR ALL APPLICATIONS TO THE EXISTING DUCTWORK NECESSARY TO PERMIT THE INSTALLATION OF NEW WORK.	
B. PROVIDE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEM IN SERVICE DURING CONSTRUCTION.	
C. REMOVE, REDUCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.	
D. CONNECTION TO COORDINATE WITH HOOKS FOR ALL MECHANICAL SERVICE OUTAGES.	
E. REMOVE UNFINISHED SECTIONS OF SUPPLY AND RETURN AIR DUCTWORK BACK TO MAINS PATCH OPENING. EXISTING DUCTWORK IS TO BE CAPPED AND REUSED. LOCATE THE END CAP WITHIN 6" OF THE LAST BRANCH. END CAPS SHALL BE 2" PRESSURE CLASS AND SEAL CLASS A.	
F. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FINISHES OR COMPONENTS NOT IDENTIFIED IN THIS DEMOLITION PLAN. DAMAGED ITEMS SHALL BE REPAIR OR REPAIRED TO MEET OR EXCEED FORMER CONDITIONS.	
G. REMOVE ALL ASSOCIATED CLAMPS, HANGERS, SUPPORTS, ETC. ASSOCIATED WITH DUCTWORK REMOVAL.	
H. EXISTING OPENINGS IN CONCRETE ARE TO BE FILLED IN WITH CONCRETE TO MATCH EXISTING. SEE ARCHITECTURAL FOR DETAILS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR EXACT NUMBER AND LOCATION OF ALL EXISTING OPENINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL EXISTING OPENINGS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND DEPTH OF ALL EXISTING OPENINGS.	
I. PRIOR TO START OF DEMOLITION, CONTRACTOR SHALL PREPARE A CURTAIN WALL DEMOLITION MATERIAL SURVEY HAS BEEN CONDUCTED IDENTIFYING ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND IN LOW AREAS.	
J. REVIEW THE DRAWING IN CONJUNCTION WITH SHEETS G101 & G102 AND CORRESPONDING DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THE INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. THE INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING.	

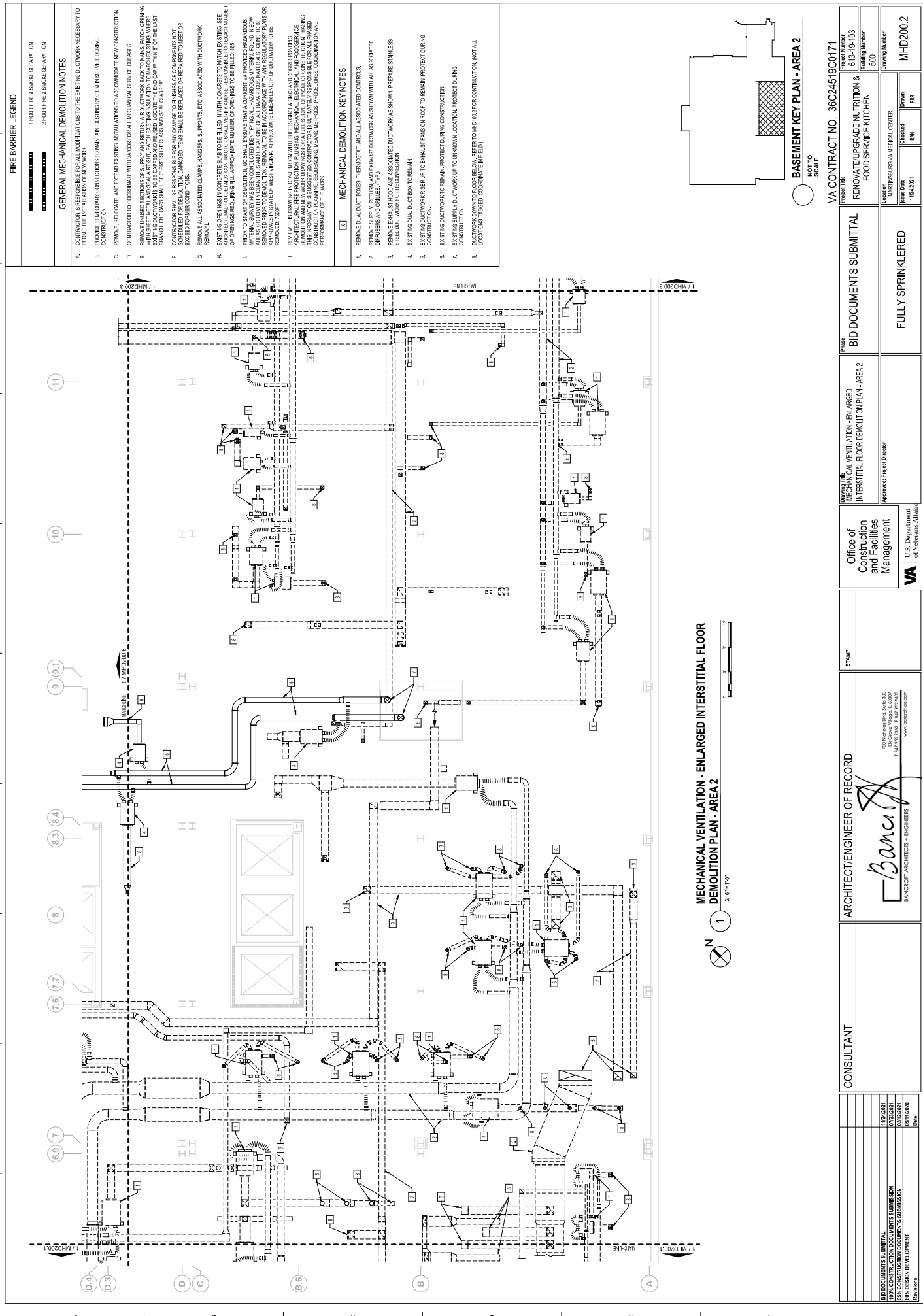
MECHANICAL DEMOLITION KEY NOTES	
1. REMOVE SUPPLY, RETURN, AND EXHAUST DUCTWORK AS SHOWN WITH ALL ASSOCIATED DIFFUSERS AND GRILLES, (TYP).	
2. DUCTWORK TO INTERSTITIAL SPACE. REFER TO H4000S FOR CONTINUATION.	
3. REMOVE EXISTING AIR HANDLING UNIT (S), INCLUDING REMOTE RETURN FAN(S) AND ALL ASSOCIATED COMPONENTS INCLUDING SUPPLY FAN, RETURN FAN, DUCTWORK, PIPING, CONTROLS, CONCRETE PAV, ETC.	
4. REMOVE EXISTING EXHAUST HOOD MAKE UP AIR UNIT (S) AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
5. REMOVE EXISTING GENERAL EXHAUST FAN (S) - AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
6. REMOVE EXISTING DUCT EXHAUST, THERMOSTAT, AND ALL ASSOCIATED CONTROLS.	
7. REMOVE EXISTING SUPPLY, RETURN, AND EXHAUST DUCT AS SHOWN AND ALL ASSOCIATED MISCELLANEOUS DUCT COMPONENTS.	
8. REMOVE EXISTING STEAM PREHEAT COIL, 500-RPH, AND ALL ASSOCIATED STEAM PIPING AND MISCELLANEOUS DUCT COMPONENTS.	
9. EXISTING 36" DIAM LOUVER TO REMAIN. PREPARE LOUVER FOR NEW CONNECTION.	
10. EXISTING 12" DIAM LOUVER TO REMAIN. PREPARE LOUVER FOR NEW CONNECTION.	
11. EXISTING UNIT HEATER (H-15) TO REMAIN. PROTECT DURING CONSTRUCTION.	
12. REMOVE EXISTING FIRE DAMPER AT DUCTWORK PENETRATION OF FIRE RATED WALLS PATCH AND SEAL OPENINGS NOT BEING USED TO MATCH EXISTING CONDITIONS. FIELD VERIFY EXACT FIRE DAMPER LOCATION.	
13. REMOVE EXISTING EXHAUST HOOD MAKE UP AIR UNIT (S) AND ALL ASSOCIATED COMPONENTS INCLUDING CONCRETE PAV, DUCTWORK, ETC.	
14. REMOVE ALL EXHAUST FANS LOCATED WITHIN OF SERVING REMOTE CONDENSING UNIT HOUSING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING. FIELD VERIFY EXACT NUMBER AND LAYOUT OF FANS. REPAIR STRUCTURE ROOF FLOORING.	
15. CONDENSING UNITS NOT USED IN NEW CONSTRUCTION.	

BASEMENT KEY PLAN - GC105 MECHANICAL ROOM	
NOT TO SCALE	

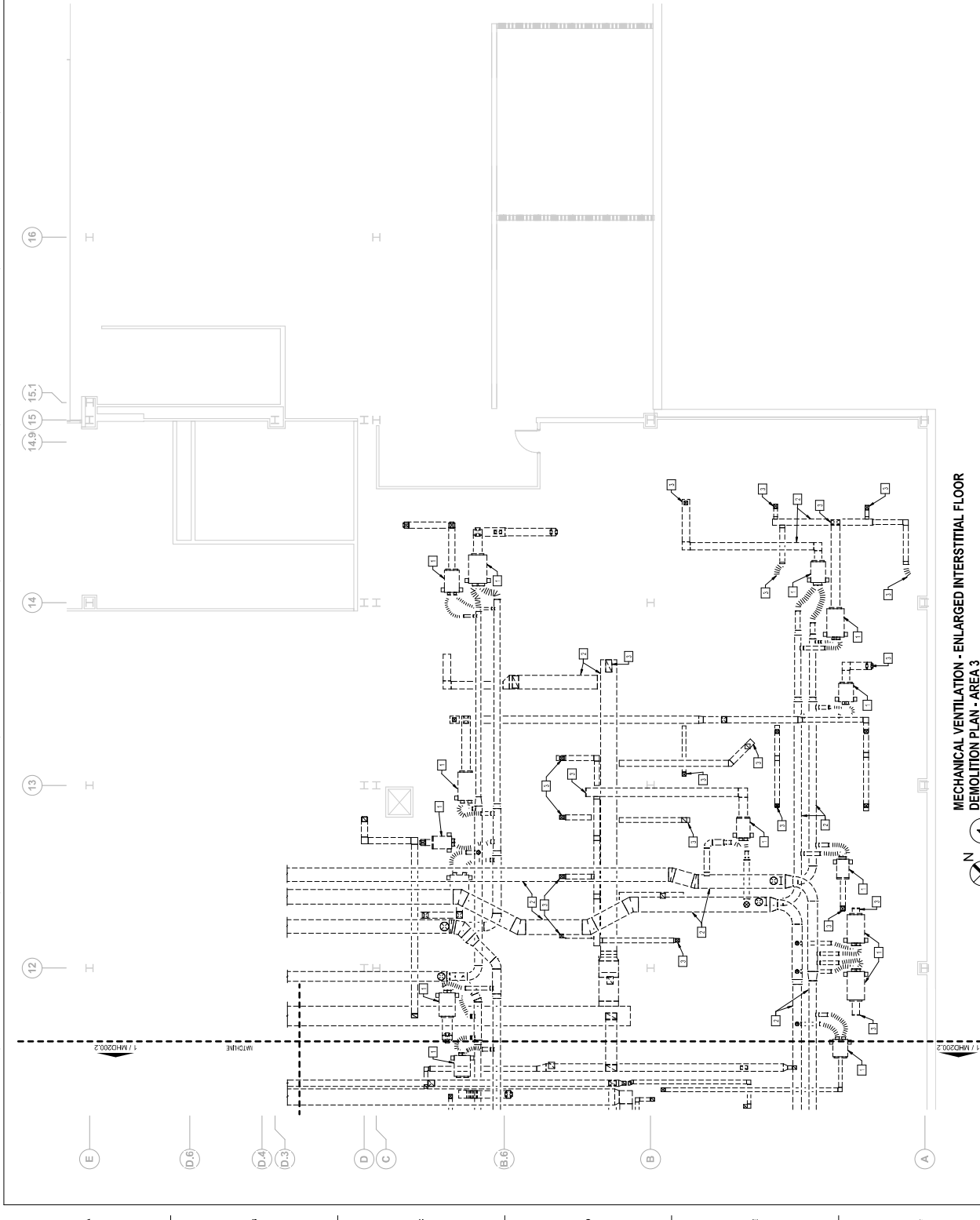
MECHANICAL VENTILATION - ENLARGED BASEMENT DEMOLITION PLAN - GC105 MECHANICAL ROOM - SOUTH	
1/4" = 1'-0"	

FIRE BARRIER LEGEND	
1 HOUR FIRE & SMOKE SEPARATION	2 HOUR FIRE & SMOKE SEPARATION





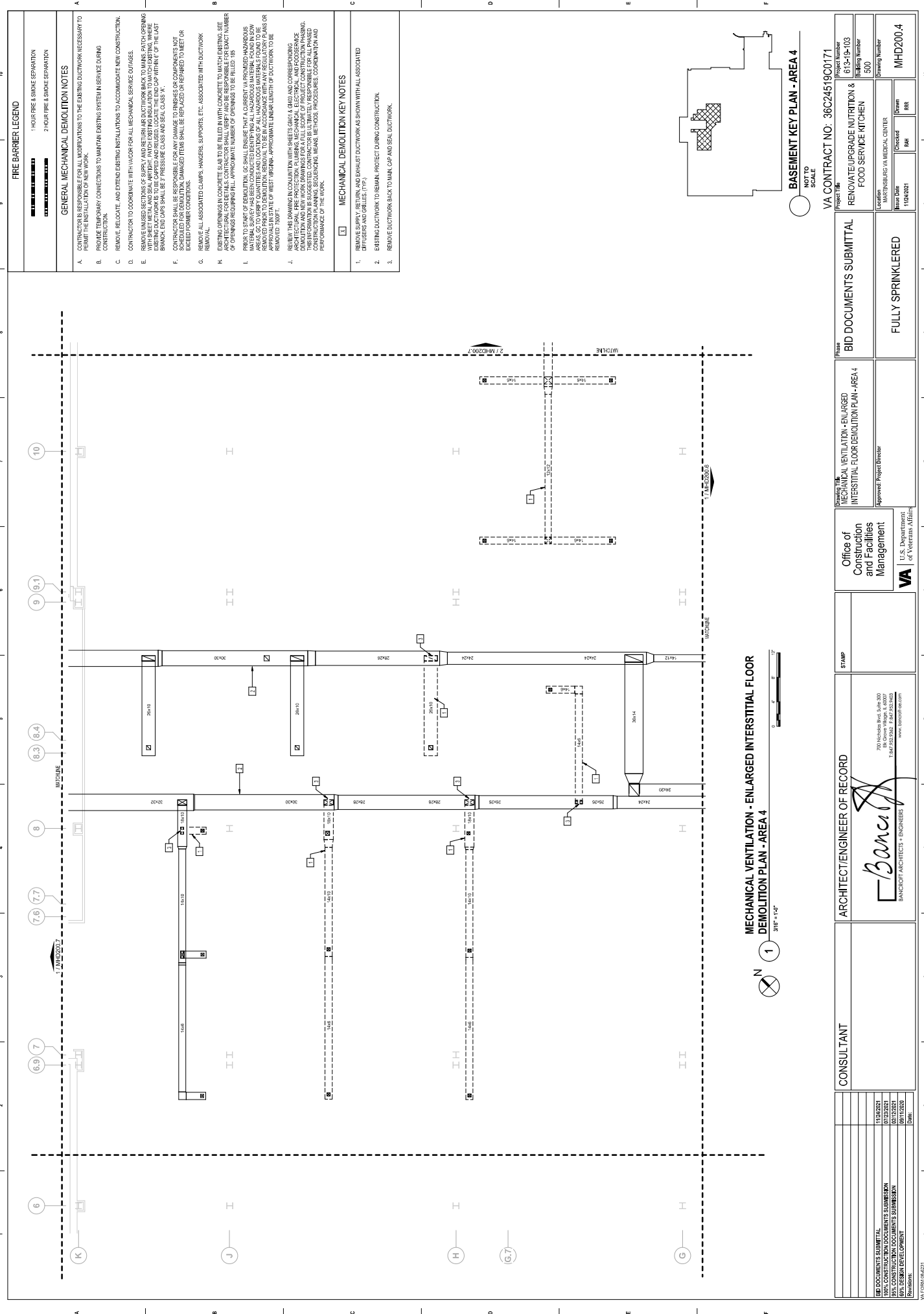
FIRE BARRIER LEGEND	
	1-HOUR FIRE & SMOKE SEPARATION
	2-HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL DEMOLITION NOTES	
CONTRACTOR IS RESPONSIBLE FOR ALL APPLICATIONS TO THE EXISTING DUCTWORK NECESSARY TO PERMIT THE INSTALLATION OF NEW WORK.	
REMOVE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEM IN SERVICE DURING CONSTRUCTION.	
REMOVE REDUCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.	
CONTRACTOR TO COORDINATE WITH HVAC FOR ALL MECHANICAL SERVICE OUTAGES.	
REMOVE UNFINISHED SECTIONS OF SUPPLY AND RETURN AIR DUCTWORK BACK TO MAKE PATCH OPENING EXISTING DUCTWORK IS TO BE CAPED AND REUSED LOCATE THE END CAP WITHIN 6" OF THE LAST BRANCH END CAPS SHALL BE 2" PRESSURE CLASS AND SEAL CLASS A.	
CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FINISHES OR COMPONENTS NOT IDENTIFIED IN THIS DRAWING. DAMAGED ITEMS SHALL BE REPAIRED TO MEET OR EXCEED FORMER CONDITIONS.	
REMOVE ALL ASSOCIATED CLAMPS, HANGERS, SUPPORTS, ETC. ASSOCIATED WITH DUCTWORK REMOVAL.	
EXISTING OPENINGS IN CONCRETE SLAB TO BE FILLED IN WITH CONCRETE TO MATCH EXISTING. SEE ARCHITECTURAL FOR DETAILS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR EXACT NUMBER AND LOCATION OF ALL EXISTING OPENINGS IN CONCRETE SLAB.	
PRIOR TO START OF DEMOLITION, OF SMALL, INSURE THAT A CURRENTLY IN PROGRESS HAZARDOUS MATERIAL SURVEY HAS BEEN CONDUCTED IDENTIFYING ALL HAZARDOUS MATERIAL FOUND IN LOW AREAS. GO TO VERIFY QUANTITIES AND LOCATIONS OF ALL HAZARDOUS MATERIALS FOUND TO BE REMOVED. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS IN STATE OF WEST VIRGINIA. APPROXIMATE LINEAR LENGTH OF DUCTWORK TO BE REMOVED: 700FT.	
REVIEW THIS DRAWING IN CONJUNCTION WITH SHEETS GRW1 & GRW2 AND CORRESPONDING MECHANICAL DEMOLITION KEY PLAN. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS IN STATE OF WEST VIRGINIA. APPROXIMATE LINEAR LENGTH OF DUCTWORK TO BE REMOVED: 700FT.	
THIS INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PHASED DEMOLITION AND NEW WORK DRAWINGS FOR A FULL SCOPE OF PROJECT CONSTRUCTION PHASING. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS IN STATE OF WEST VIRGINIA. APPROXIMATE LINEAR LENGTH OF DUCTWORK TO BE REMOVED: 700FT.	
MECHANICAL DEMOLITION KEY NOTES	
REMOVE DUAL DUCT EXHAUST, THERMOSTAT, AND ALL ASSOCIATED CONTROLS.	
REMOVE EXHAUST SYSTEMS AND EXHAUST DUCTWORK AS SHOWN WITH ALL ASSOCIATED DIFFUSERS AND VALVES, ETC.	
DUCTWORK DOWN TO FLOOR BELOW. REFER TO MCH002.2 FOR CONTINUATION. (NOT ALL LOCATIONS TAGGED, COORDINATE IN FIELD)	

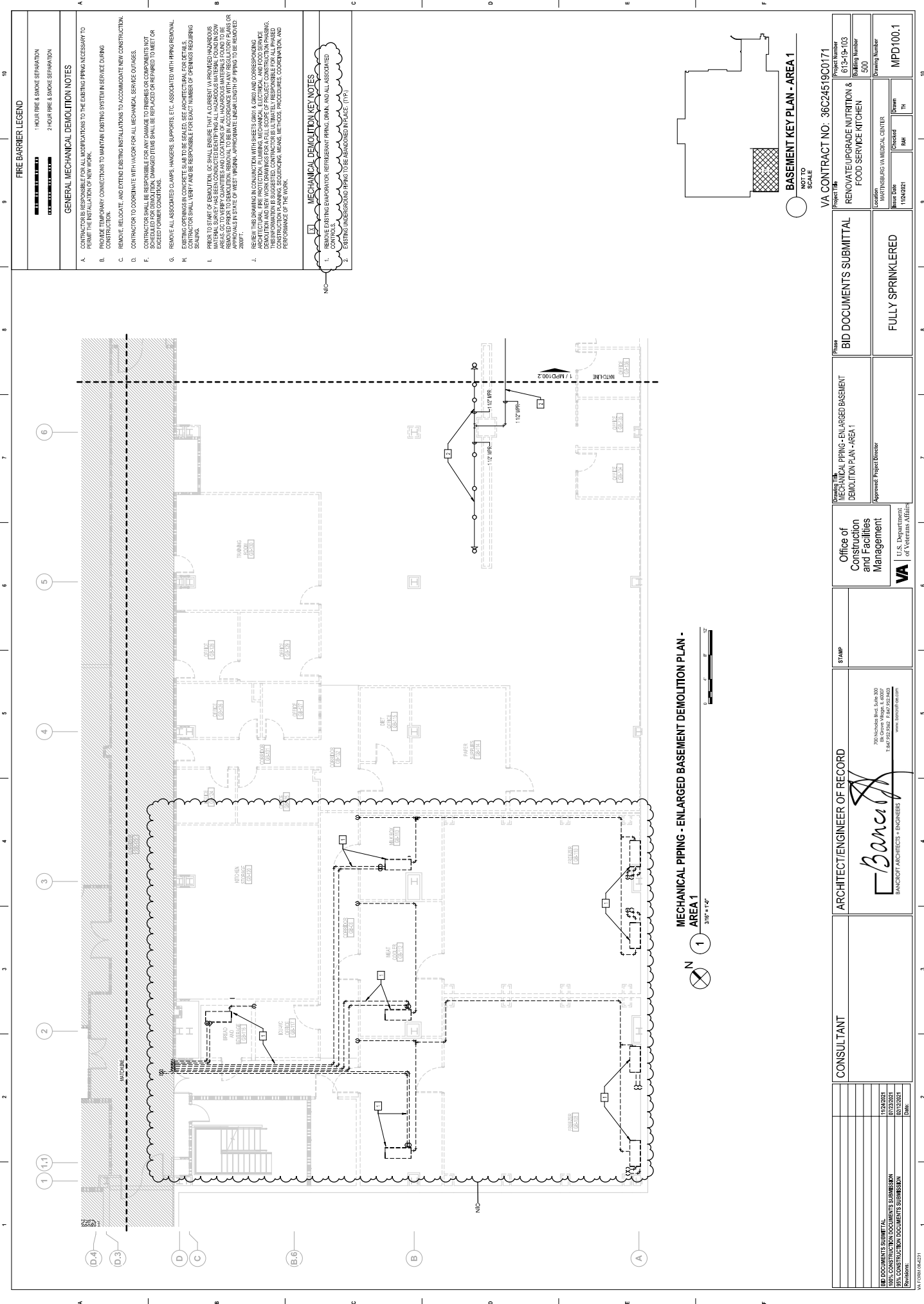


MECHANICAL VENTILATION - ENLARGED INTERSTITIAL FLOOR
DEMOLITION PLAN - AREA 3

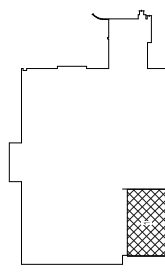


						CONSULTANT		ARCHITECT/ENGINEER OF RECORD		STAMP		Office of Construction and Facilities Management		U.S. Department of Veterans Affairs		Fully Sprinklered		Approved Project Director		Mechanical Ventilation - Enlarged Interstitial Floor Devolution Plan - Area 3		Phase		Project Title		Project Number	
								BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS		BANKROFT ARCHITECTS + ENGINEERS	
11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021		11/24/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021	
BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT		BY: J. B. BANKROFT	
CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021		CHECKED: 07/17/2021	
DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021		DATE: 07/17/2021																			



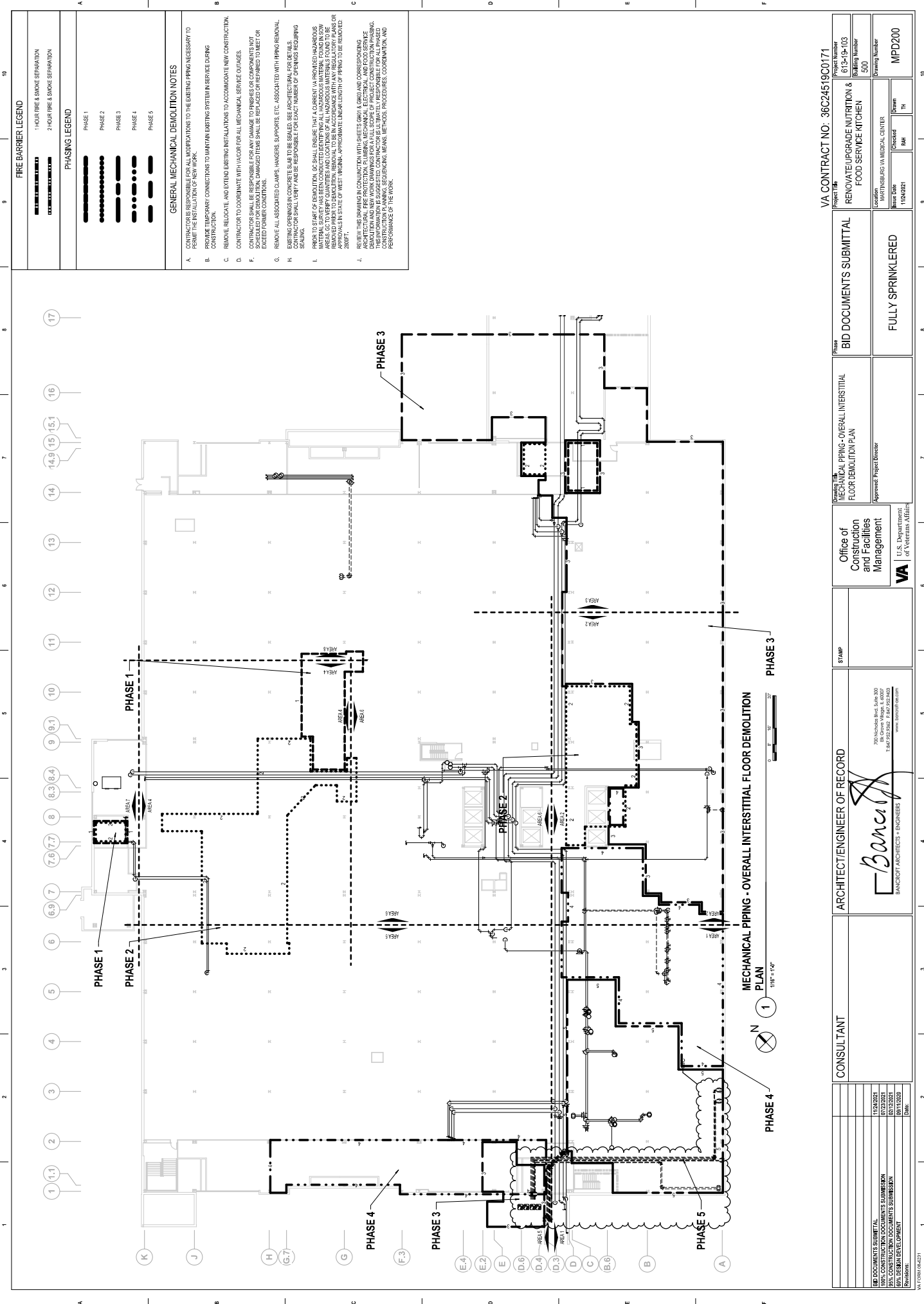


MECHANICAL PIPING - ENLARGED BASEMENT DEMOLITION PLAN - AREA 1
3/8" = 1'-0"



BASEMENT KEY PLAN - AREA 1
3/8" = 1'-0"

PROJECT INFORMATION		PROJECT INFORMATION		PROJECT INFORMATION	
Project Name	VA CONTRACT NO. 36C24519C0171	Project Number	613-19-103	Project Title	RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN
Building Number	500	Building Number	500	Location	NATIONAL INSURANCE VA MEDICAL CENTER
Drawing Number	MPD100.1	Drawing Number	MPD100.1	Drawn By	RAM
Drawn Date	11/04/2021	Drawn Date	11/04/2021	Drawn By	RAM
APPROVED		APPROVED		APPROVED	
Office of Construction and Facilities Management		Office of Construction and Facilities Management		Office of Construction and Facilities Management	
U.S. Department of Veterans Affairs		U.S. Department of Veterans Affairs		U.S. Department of Veterans Affairs	
ARCHITECT/ENGINEER OF RECORD		ARCHITECT/ENGINEER OF RECORD		ARCHITECT/ENGINEER OF RECORD	
BANCROFT ARCHITECTS + ENGINEERS		BANCROFT ARCHITECTS + ENGINEERS		BANCROFT ARCHITECTS + ENGINEERS	
CONSULTANT		CONSULTANT		CONSULTANT	
BID DOCUMENTS SUBMITTAL		BID DOCUMENTS SUBMITTAL		BID DOCUMENTS SUBMITTAL	
MECHANICAL PIPING - ENLARGED BASEMENT DEMOLITION PLAN - AREA 1		MECHANICAL PIPING - ENLARGED BASEMENT DEMOLITION PLAN - AREA 1		MECHANICAL PIPING - ENLARGED BASEMENT DEMOLITION PLAN - AREA 1	
FULLY SPRINKLERED		FULLY SPRINKLERED		FULLY SPRINKLERED	
FIRE BARRIER LEGEND		FIRE BARRIER LEGEND		FIRE BARRIER LEGEND	
1 HOUR FIRE & SMOKE SEPARATION		1 HOUR FIRE & SMOKE SEPARATION		1 HOUR FIRE & SMOKE SEPARATION	
2 HOUR FIRE & SMOKE SEPARATION		2 HOUR FIRE & SMOKE SEPARATION		2 HOUR FIRE & SMOKE SEPARATION	
GENERAL MECHANICAL DEMOLITION NOTES		GENERAL MECHANICAL DEMOLITION NOTES		GENERAL MECHANICAL DEMOLITION NOTES	
CONTRACTOR IS RESPONSIBLE FOR ALL INTERFERENCES TO THE EXISTING PIPING NECESSARY TO PERMIT THE INSTALLATION OF NEW WORK.		CONTRACTOR IS RESPONSIBLE FOR ALL INTERFERENCES TO THE EXISTING PIPING NECESSARY TO PERMIT THE INSTALLATION OF NEW WORK.		CONTRACTOR IS RESPONSIBLE FOR ALL INTERFERENCES TO THE EXISTING PIPING NECESSARY TO PERMIT THE INSTALLATION OF NEW WORK.	
REMOVE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEM IN SERVICE DURING CONSTRUCTION.		REMOVE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEM IN SERVICE DURING CONSTRUCTION.		REMOVE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEM IN SERVICE DURING CONSTRUCTION.	
REMOVE REDUCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.		REMOVE REDUCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.		REMOVE REDUCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.	
CONNECTION TO COORDINATE WITH HOOKS FOR ALL MECHANICAL SERVICE OUTAGES.		CONNECTION TO COORDINATE WITH HOOKS FOR ALL MECHANICAL SERVICE OUTAGES.		CONNECTION TO COORDINATE WITH HOOKS FOR ALL MECHANICAL SERVICE OUTAGES.	
CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FINISHES OR COMPONENTS NOT DEMOLISHED. DAMAGE FROM SPALLS, REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.		CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FINISHES OR COMPONENTS NOT DEMOLISHED. DAMAGE FROM SPALLS, REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.		CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FINISHES OR COMPONENTS NOT DEMOLISHED. DAMAGE FROM SPALLS, REPAIRS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.	
REMOVE ALL ASSOCIATED CLAMPS, HANGERS, SUPPORTS, ETC. ASSOCIATED WITH PIPING REMOVAL.		REMOVE ALL ASSOCIATED CLAMPS, HANGERS, SUPPORTS, ETC. ASSOCIATED WITH PIPING REMOVAL.		REMOVE ALL ASSOCIATED CLAMPS, HANGERS, SUPPORTS, ETC. ASSOCIATED WITH PIPING REMOVAL.	
REPAIR OPENINGS IN CONCRETE SLAB TO BE SEALED. SEE ARCHITECTURAL FOR DETAILS.		REPAIR OPENINGS IN CONCRETE SLAB TO BE SEALED. SEE ARCHITECTURAL FOR DETAILS.		REPAIR OPENINGS IN CONCRETE SLAB TO BE SEALED. SEE ARCHITECTURAL FOR DETAILS.	
CONTRACTOR SHALL LEAVE AND BE RESPONSIBLE FOR EACH NUMBER OF OPENINGS REQUIRING SEALING.		CONTRACTOR SHALL LEAVE AND BE RESPONSIBLE FOR EACH NUMBER OF OPENINGS REQUIRING SEALING.		CONTRACTOR SHALL LEAVE AND BE RESPONSIBLE FOR EACH NUMBER OF OPENINGS REQUIRING SEALING.	
PRIOR TO START OF DEMOLITION, CONTRACTOR SHALL ENSURE THAT A CURRENT (A) PROVIDED HAZARDOUS MATERIAL SURVEY HAS BEEN CONDUCTED AND (B) ALL HAZARDOUS MATERIALS HAVE BEEN REMOVED PRIOR TO DEMOLITION. REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS.		PRIOR TO START OF DEMOLITION, CONTRACTOR SHALL ENSURE THAT A CURRENT (A) PROVIDED HAZARDOUS MATERIAL SURVEY HAS BEEN CONDUCTED AND (B) ALL HAZARDOUS MATERIALS HAVE BEEN REMOVED PRIOR TO DEMOLITION. REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS.		PRIOR TO START OF DEMOLITION, CONTRACTOR SHALL ENSURE THAT A CURRENT (A) PROVIDED HAZARDOUS MATERIAL SURVEY HAS BEEN CONDUCTED AND (B) ALL HAZARDOUS MATERIALS HAVE BEEN REMOVED PRIOR TO DEMOLITION. REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS.	
ARCHITECTURAL FIRE PROTECTION PLUMBING, MECHANICAL, ELECTRICAL, AND FOOD SERVICE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS.		ARCHITECTURAL FIRE PROTECTION PLUMBING, MECHANICAL, ELECTRICAL, AND FOOD SERVICE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS.		ARCHITECTURAL FIRE PROTECTION PLUMBING, MECHANICAL, ELECTRICAL, AND FOOD SERVICE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL HAZARDOUS MATERIALS FOUND TO BE HAZARDOUS.	
MECHANICAL DEMOLITION KEY NOTES		MECHANICAL DEMOLITION KEY NOTES		MECHANICAL DEMOLITION KEY NOTES	
1. REMOVE EXISTING EVAPORATOR, REFRIGERANT PIPING, DRAIN, AND ALL ASSOCIATED CONTROLS.		1. REMOVE EXISTING EVAPORATOR, REFRIGERANT PIPING, DRAIN, AND ALL ASSOCIATED CONTROLS.		1. REMOVE EXISTING EVAPORATOR, REFRIGERANT PIPING, DRAIN, AND ALL ASSOCIATED CONTROLS.	
2. EXISTING UNDERGROUND PIPING TO BE REMOVED IN PLACE (TYP).		2. EXISTING UNDERGROUND PIPING TO BE REMOVED IN PLACE (TYP).		2. EXISTING UNDERGROUND PIPING TO BE REMOVED IN PLACE (TYP).	



FIRE BARRIER LEGEND

- 1-HOUR FIRE & SMOKE SEPARATION
- 2-HOUR FIRE & SMOKE SEPARATION

PHASING LEGEND

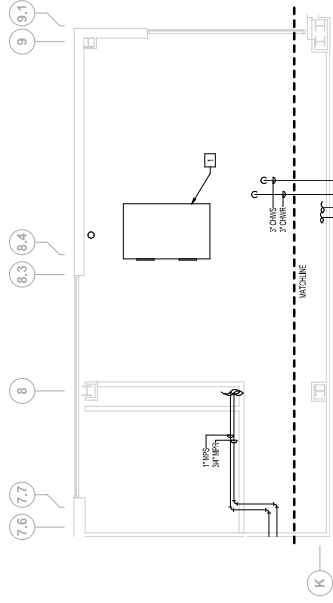
- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4
- PHASE 5

GENERAL MECHANICAL DEMOLITION NOTES

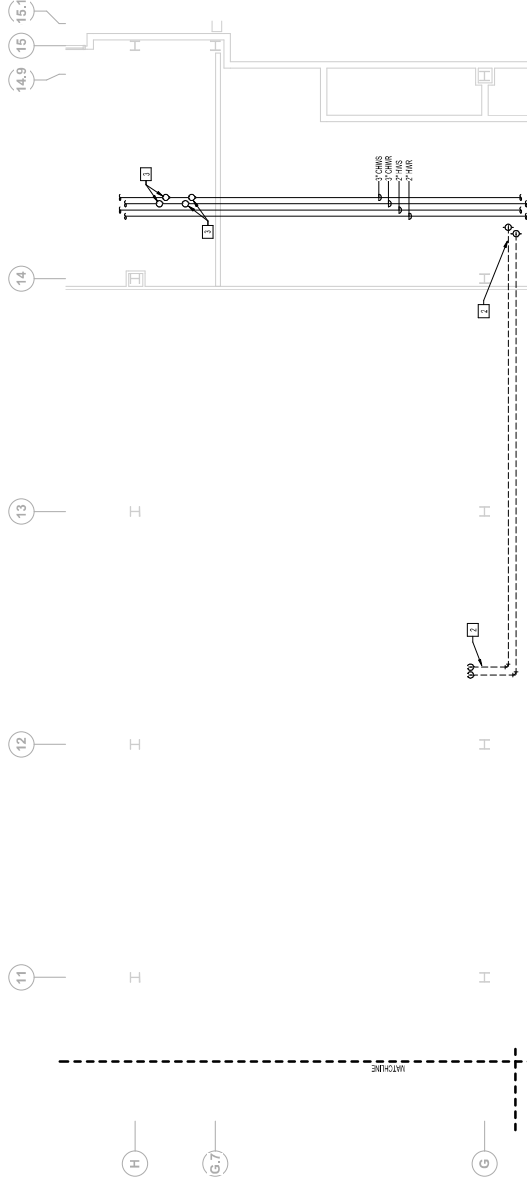
- A. CONTRACTOR IS RESPONSIBLE FOR ALL MODIFICATIONS TO THE EXISTING PIPING NECESSARY TO PERMIT THE INSTALLATION OF NEW WORK.
- B. MAKE TEMPORARY CONNECTIONS TO MAINTAIN EXISTING SYSTEM IN SERVICE DURING CONSTRUCTION.
- C. REMOVE, RELOCATE, AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION.
- D. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO FINISHES OR COMPONENTS NOT TO BE DEMOLISHED.
- E. DAMAGED ITEMS SHALL BE REPLACED OR REPAIRED TO MEET OR EXCEED EXISTING CONDITIONS.
- F. REMOVE ALL ASSOCIATED CLAMPS, HANGERS, SUPPORTS, ETC., ASSOCIATED WITH PIPING REMOVAL.
- G. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT WORK AREAS.
- H. CONTINGENCY SHALL BE USED TO COVER THE RISK OF EXCESSIVE NUMBER OF CHANGES REQUIRING SEALING.
- I. PRIOR TO START OF DEMOLITION, GC SHALL ENSURE THAT A CURRENT (A PROVIDED HAZARDOUS MATERIAL SERVICES REPORT) IDENTIFYING ALL HAZARDOUS MATERIALS FOUND IN THE WORK AREA HAS BEEN OBTAINED AND THAT ALL HAZARDOUS MATERIALS ARE PROPERLY REMOVED PRIOR TO DEMOLITION. REMOVAL TO BE IN ACCORDANCE WITH ANY REGULATORY PLANS OR ORDINANCES IN STATE OF WEST VIRGINIA. APPROXIMATE LINEAR LENGTH OF PIPING TO BE REMOVED: 2800 FT.
- J. REVIEW THE DRAWINGS IN CONJUNCTION WITH SHEETS 06011, 06012 AND 06013 FOR CORRESPONDING ARCHITECTURAL, FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL, AND FOOD SERVICE DEMOLITION. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT WORK AREAS. THE INFORMATION IS SUGGESTED. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL PLANNED PERFORMANCE OF THE WORK.

VA CONTRACT NO: 36C24519C0171

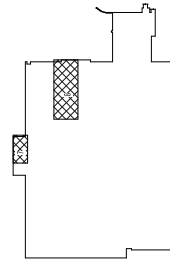
Project Title		Project Number	613-19-103
RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		Building Number	500
Location		Drawing Number	MPD200
WATNS/RE VA MEDICAL CENTER		Drawn	TM
New Date		Revised	RAM
11/04/2021			
Phase		BID DOCUMENTS SUBMITTAL	
MECHANICAL PIPING - OVERALL INTERSTITIAL FLOOR DEMOLITION PLAN		Approved: Project Director	
Office of Construction and Facilities Management		FULLY SPRINKLERED	
U.S. Department of Veterans Affairs			
ARCHITECT/ENGINEER OF RECORD		STAMP	
Bancroft Architects + Engineers			
CONSULTANT			
REVISIONS			
REV. NO.		DATE	
1		03/20/21	
2		07/27/21	
3		09/17/21	
4		09/17/21	
5		09/17/21	
6		09/17/21	
7		09/17/21	
8		09/17/21	
9		09/17/21	
10		09/17/21	
11		09/17/21	
12		09/17/21	
13		09/17/21	
14		09/17/21	
15		09/17/21	
16		09/17/21	
17		09/17/21	



**MECHANICAL PIPING - ENLARGED INTERSTITIAL FLOOR
DEMOLITION PLAN - AREA 7**



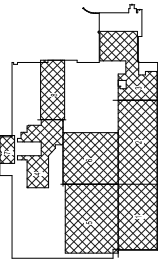
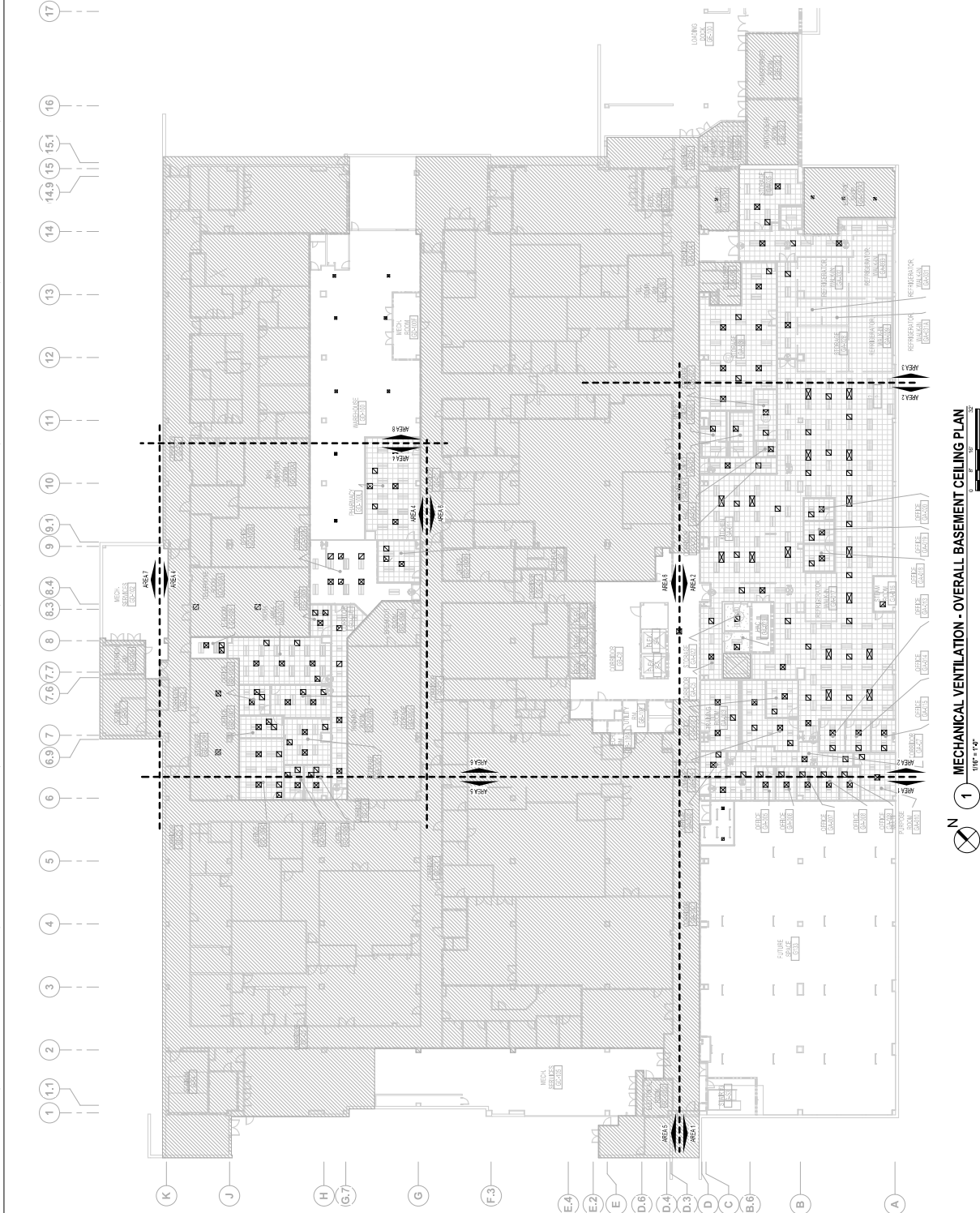
**MECHANICAL PIPING - ENLARGED INTERSTITIAL FLOOR
DEMOLITION PLAN - AREA 8**



BASEMENT KEY PLAN - AREA 7 & 8

[illegible]

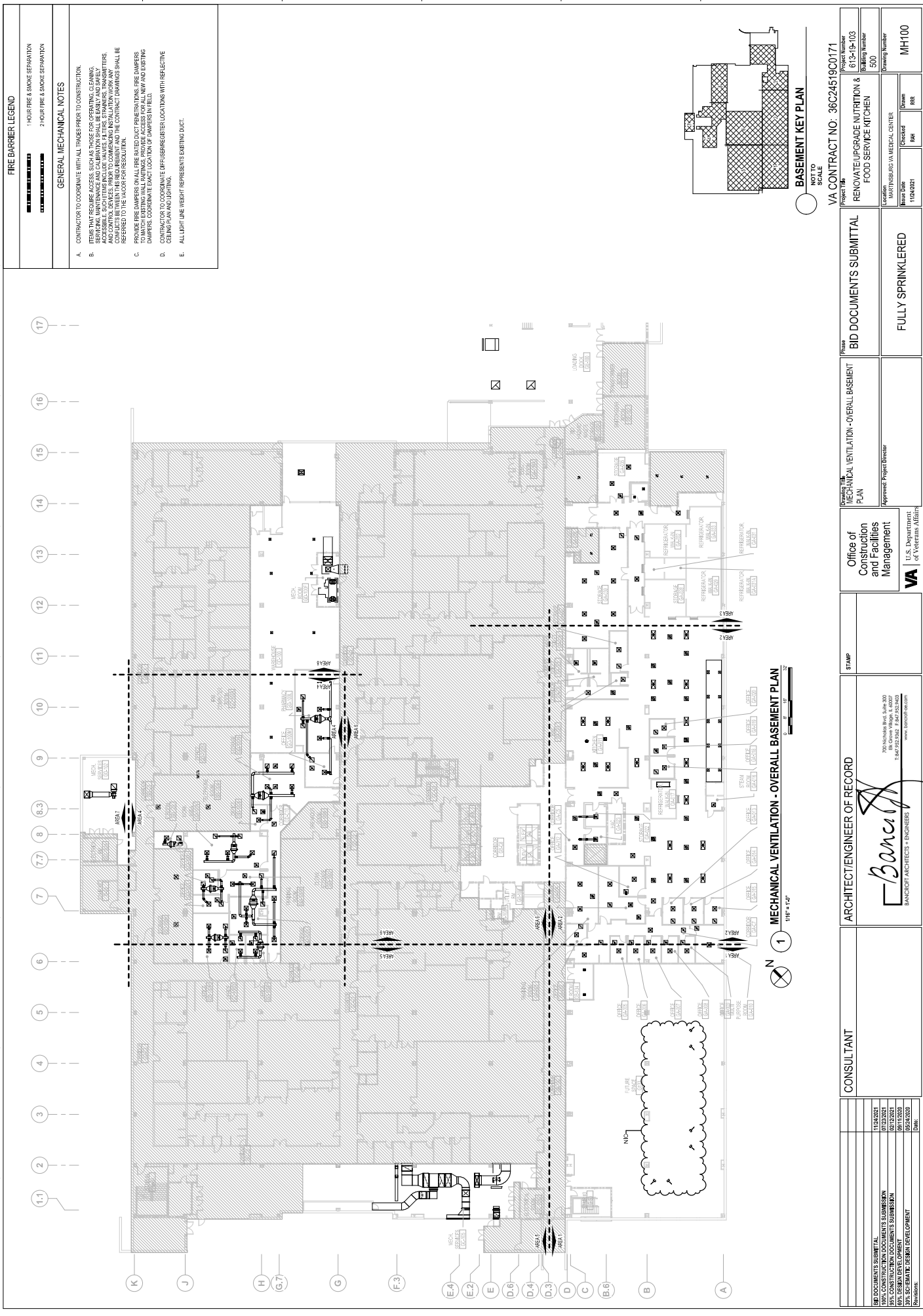
FIRE BARRIER LEGEND	
	1-HOUR FIRE & SMOKE SEPARATION
	2-HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL NOTES	
<p>A. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.</p> <p>B. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, REPAIRS, MAINTENANCE, AND INSPECTION, SHALL BE IDENTIFIED BY ACCESSIBLE ROOF ACCESS POINTS (ARAP) AND ACCESSIBLE ROOF ACCESS POINTS (ARAP) SHALL BE IDENTIFIED BY ACCESSIBLE ROOF ACCESS POINTS (ARAP) AND ACCESSIBLE ROOF ACCESS POINTS (ARAP) SHALL BE IDENTIFIED BY ACCESSIBLE ROOF ACCESS POINTS (ARAP).</p> <p>C. PROVIDE FIRE DAMPERS ON ALL FIRE RATED DUCT PENETRATIONS. FIRE DAMPERS SHALL BE IDENTIFIED BY ACCESSIBLE ROOF ACCESS POINTS (ARAP) AND ACCESSIBLE ROOF ACCESS POINTS (ARAP) SHALL BE IDENTIFIED BY ACCESSIBLE ROOF ACCESS POINTS (ARAP) AND ACCESSIBLE ROOF ACCESS POINTS (ARAP) SHALL BE IDENTIFIED BY ACCESSIBLE ROOF ACCESS POINTS (ARAP).</p> <p>D. TO MATCH EXISTING WALL RATINGS, PROVIDE ACCESS FOR ALL NEW AND EXISTING DAMPERS. COORDINATE EXACT LOCATION OF DAMPERS IN FIELDS.</p> <p>E. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.</p> <p>F. ALL LIGHT LINE WEIGHT REPRESENTS EXISTING DUCT.</p>	



BASEMENT KEY PLAN
NOT TO SCALE

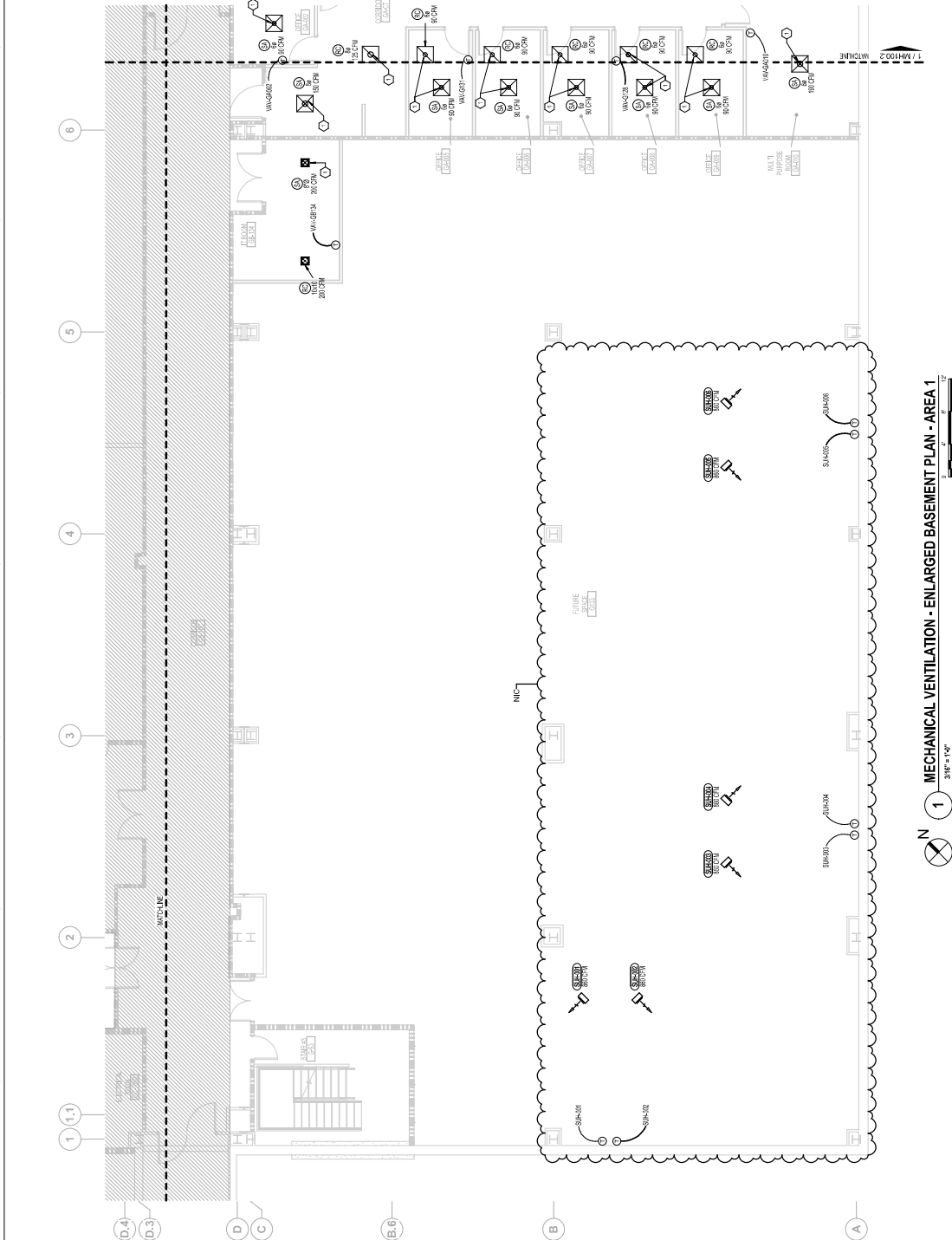
PROJECT NO: 36C24519C0171 PROJECT TITLE: RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN BUILDING NUMBER: 500 DRAWING NUMBER: MC100	
OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT U.S. DEPARTMENT OF VETERANS AFFAIRS	
PHASE: BID DOCUMENTS SUBMITTAL APPROVED: PROJECT DIRECTOR DATE: 11/04/2021	
FULLY SPRINKLERED	
CONSULTANT: ARCHITECT/ENGINEER OF RECORD BANCROFT ARCHITECTS + ENGINEERS 1000 KENNEDY BLVD., SUITE 200 ST. LOUIS, MISSOURI 63102 TEL: 314.782.2222 FAX: 314.782.2222 WWW.BANCROFT-DE.COM	
REVISIONS:	
NO. 1	DATE
1	11/04/2021
2	11/04/2021
3	11/04/2021
4	11/04/2021
5	11/04/2021
6	11/04/2021
7	11/04/2021
8	11/04/2021
9	11/04/2021
10	11/04/2021
11	11/04/2021
12	11/04/2021
13	11/04/2021
14	11/04/2021
15	11/04/2021
16	11/04/2021
17	11/04/2021

FIRE BARRIER LEGEND	
	1-HOUR FIRE & SMOKE SEPARATION
	2-HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL NOTES	
<p>A. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.</p> <p>B. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, REPAIRS, AND MAINTENANCE, SHALL BE INDICATED BY ACCESS PANELS. ACCESSIBLE, SUCH ITEMS INCLUDE VALVES, FLEXIBLE STRAINERS, TRANSDUCERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION, WORK ANY ACCESS PANELS SHALL BE REFERRED TO THE VENDOR FOR RESOLUTION.</p> <p>C. PROVIDE FIRE DAMPERS ON ALL FIRE RATED DUCT PENETRATIONS. FIRE DAMPERS TO MATCH EXISTING WALL RATINGS. PROVIDE ACCESS FOR ALL NEW AND EXISTING DAMPERS. COORDINATE EXACT LOCATION OF DAMPERS IN FELL.</p> <p>D. CONTRACTOR TO COORDINATE DIFFUSERS/GRILL LOCATIONS WITH REFLECTIVE CEILING LAYOUT LIGHTING.</p> <p>E. ALL LIGHT LINE WEIGHT REPRESENTS EXISTING DUCT.</p>	

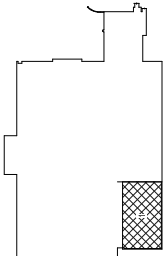


BID DOCUMENTS SUBMITTAL PHASE BID DOCUMENTS SUBMITTAL		PROJECT NO. 36C24519C0171 PROJECT TITLE RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		PROJECT NUMBER 613-19-103 BUILDING NUMBER 500	
FULLY SPRINKLERED APPROVED PROJECT DIRECTOR U.S. Department of Veterans Affairs		LOCATION VA MEDICAL CENTER DATE 11/02/2021		DRAWING NUMBER MH100	
OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT VA		ARCHITECT/ENGINEER OF RECORD BANCROFT ARCHITECTS + ENGINEERS		CONSULTANT DATE	
11/02/2021 02/10/2021 05/11/2021 05/11/2021 05/11/2021		11/02/2021 02/10/2021 05/11/2021 05/11/2021 05/11/2021		11/02/2021 02/10/2021 05/11/2021 05/11/2021 05/11/2021	

FIRE BARRIER LEGEND	
1 HOUR FIRE & SMOKE SEPARATION	2 HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL NOTES	
<p>A. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.</p> <p>B. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, MAINTENANCE, AND REPAIR, SHALL BE INDICATED BY ACCESS PANELS. ACCESSIBLE, SUCH ITEMS INCLUDE VALVES, FLEXIBLE SPRINKLER TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK ANY ACCESS PANELS SHALL BE IDENTIFIED AND THE CONTRACT DRAWINGS SHALL BE REFERRED TO THE VENDOR FOR RESOLUTION.</p> <p>C. PROVIDE FIRE DAMPERS ON ALL FIRE RATED DUCT PENETRATIONS. FIRE DAMPERS TO MATCH EXISTING WALL RATINGS. PROVIDE ACCESS FOR ALL NEW AND EXISTING DAMPERS. COORDINATE EXACT LOCATION OF DAMPERS IN FIELDS.</p> <p>D. CONTRACTOR TO COORDINATE DIFFUSERS/GRATES LOCATIONS WITH REFLECTIVE CEILING LAYOUT AND LIGHTING.</p> <p>E. ALL LIGHT LINE WEIGHT REPRESENTS EXISTING DUCT.</p>	
MECHANICAL KEY NOTES	
<p>1. DUCT WITH SIZE INDICATED IN EACH SIZE UP TO INTERSTITIAL SPACE. REFER TO MODEL 1 FOR CONTINUATION (TYP.)</p>	



1 MECHANICAL VENTILATION - ENLARGED BASEMENT PLAN - AREA 1
3/16" = 1'-0"

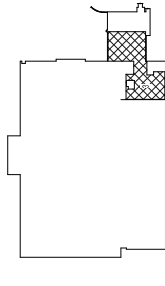


BASEMENT KEY PLAN - AREA 1
NOT TO SCALE

PROJECT NO: 36C24519C0171 PROJECT TITLE: RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN BUILDING NUMBER: 500 DRAWING NUMBER: MH100.1		PHASE: BID DOCUMENTS SUBMITTAL DRAWING NO: MECHANICAL VENTILATION - ENLARGED BASEMENT PLAN - AREA 1 APPROVED: Project Director		OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT U.S. Department of Veterans Affairs		STAMP ARCHITECT/ENGINEER OF RECORD CONSULTANT		DATE: 07/20/2024 BY: 07/20/2024 CHECK: 07/20/2024 DATE: 07/20/2024 BY: 07/20/2024 CHECK: 07/20/2024	
PROJECT NO: 36C24519C0171 PROJECT TITLE: RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN BUILDING NUMBER: 500 DRAWING NUMBER: MH100.1		PHASE: BID DOCUMENTS SUBMITTAL DRAWING NO: MECHANICAL VENTILATION - ENLARGED BASEMENT PLAN - AREA 1 APPROVED: Project Director		OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT U.S. Department of Veterans Affairs		STAMP ARCHITECT/ENGINEER OF RECORD CONSULTANT		DATE: 07/20/2024 BY: 07/20/2024 CHECK: 07/20/2024 DATE: 07/20/2024 BY: 07/20/2024 CHECK: 07/20/2024	



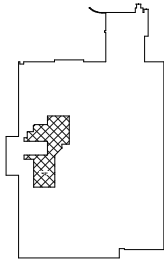
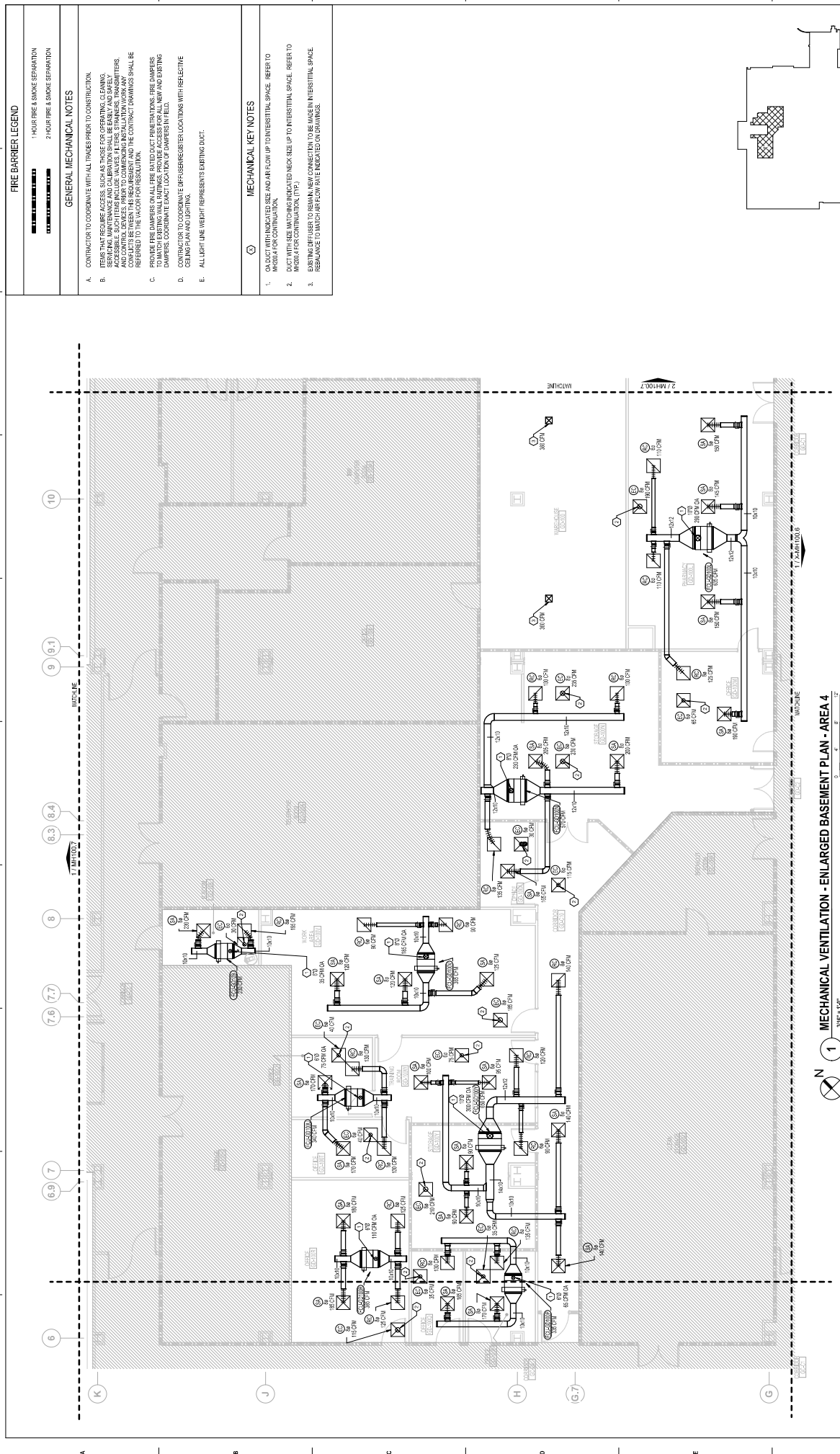
MECHANICAL VENTILATION - ENLARGED BASEMENT PLAN - AREA 3



NOT TO SCALE

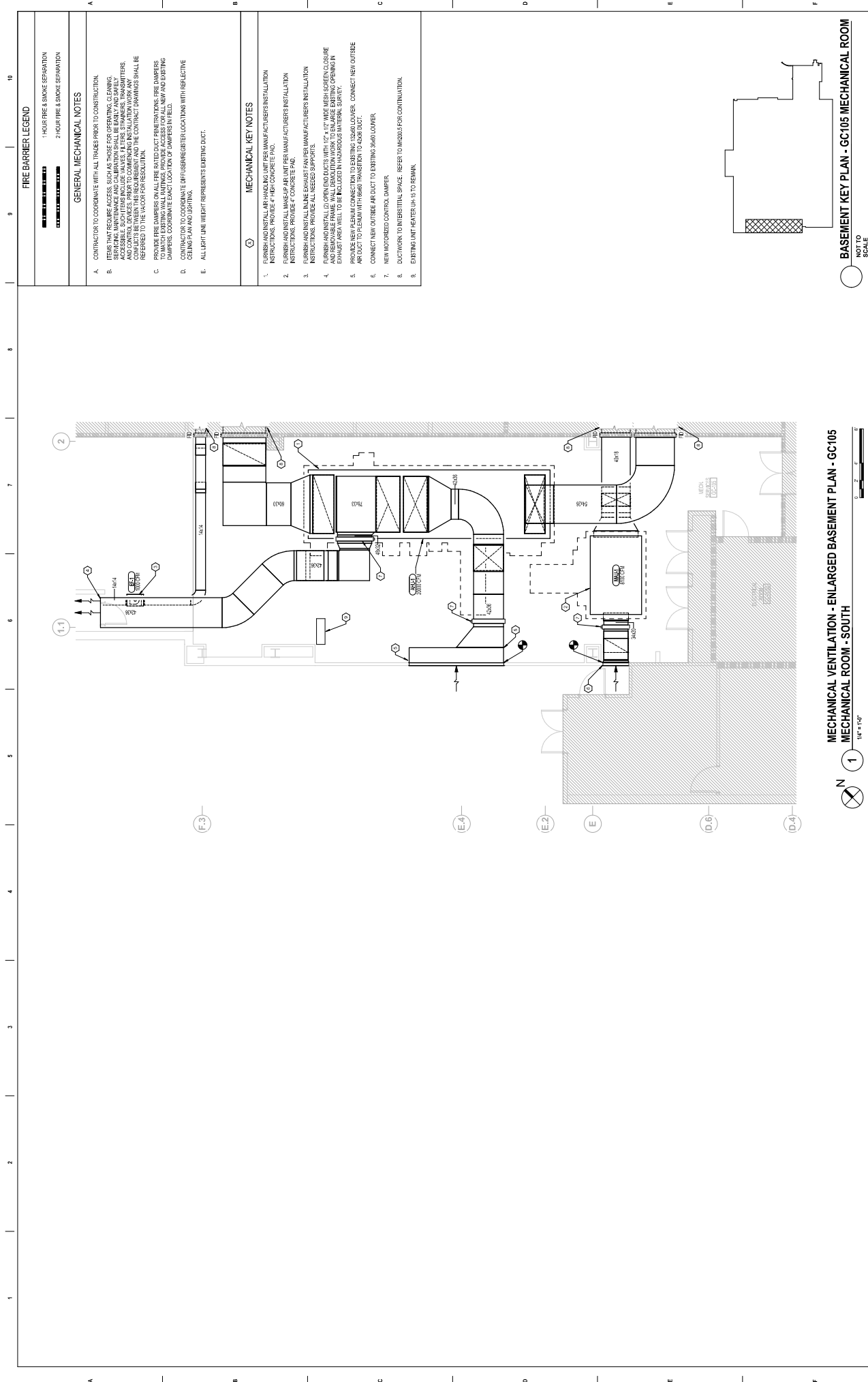
BASEMENT KEY PLAN - AREA 3

[illegible]



1 MECHANICAL VENTILATION - ENLARGED BASEMENT PLAN - AREA 4

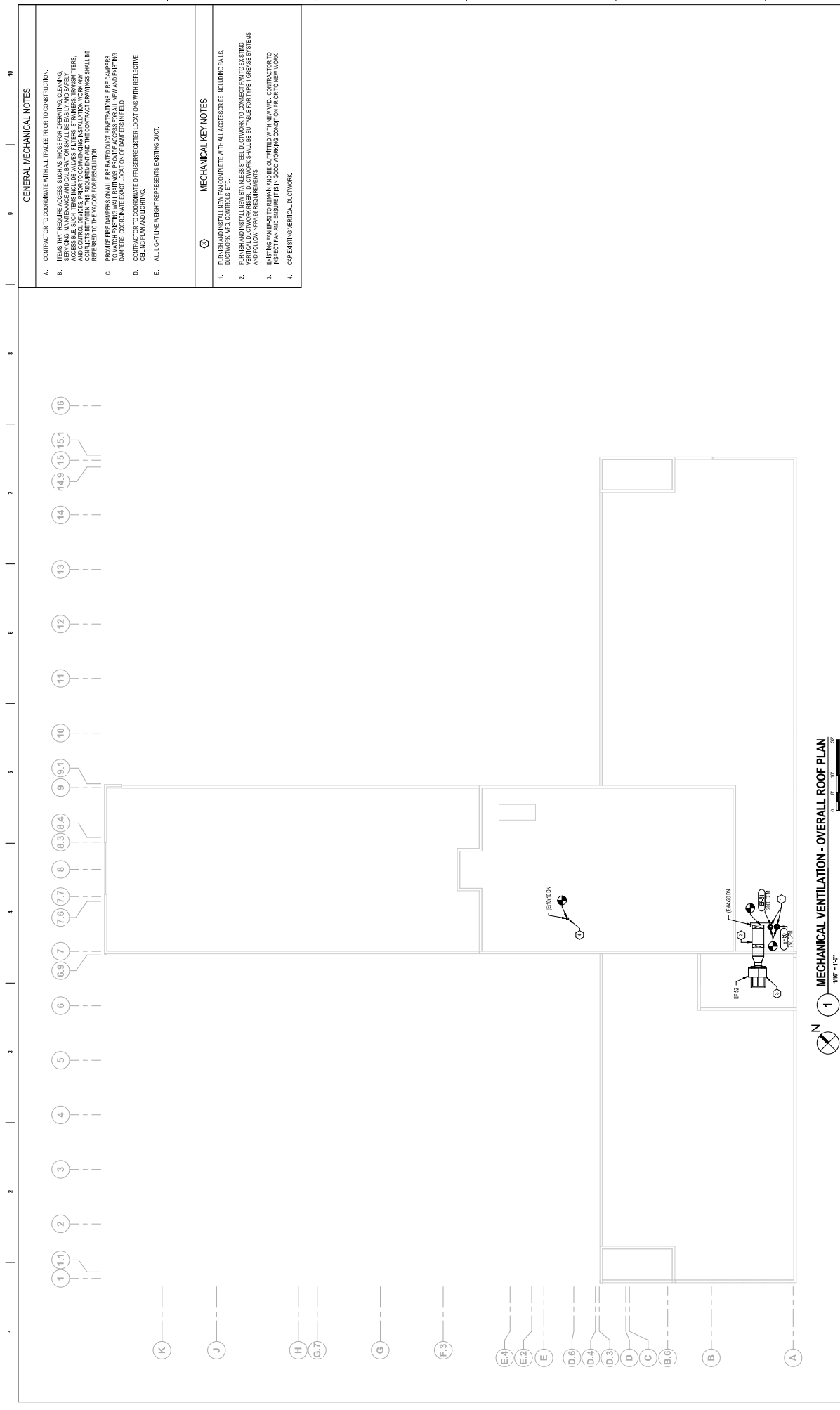
[illegible]



**MECHANICAL VENTILATION - ENLARGED BASEMENT PLAN - GC105
MECHANICAL ROOM - SOUTH**

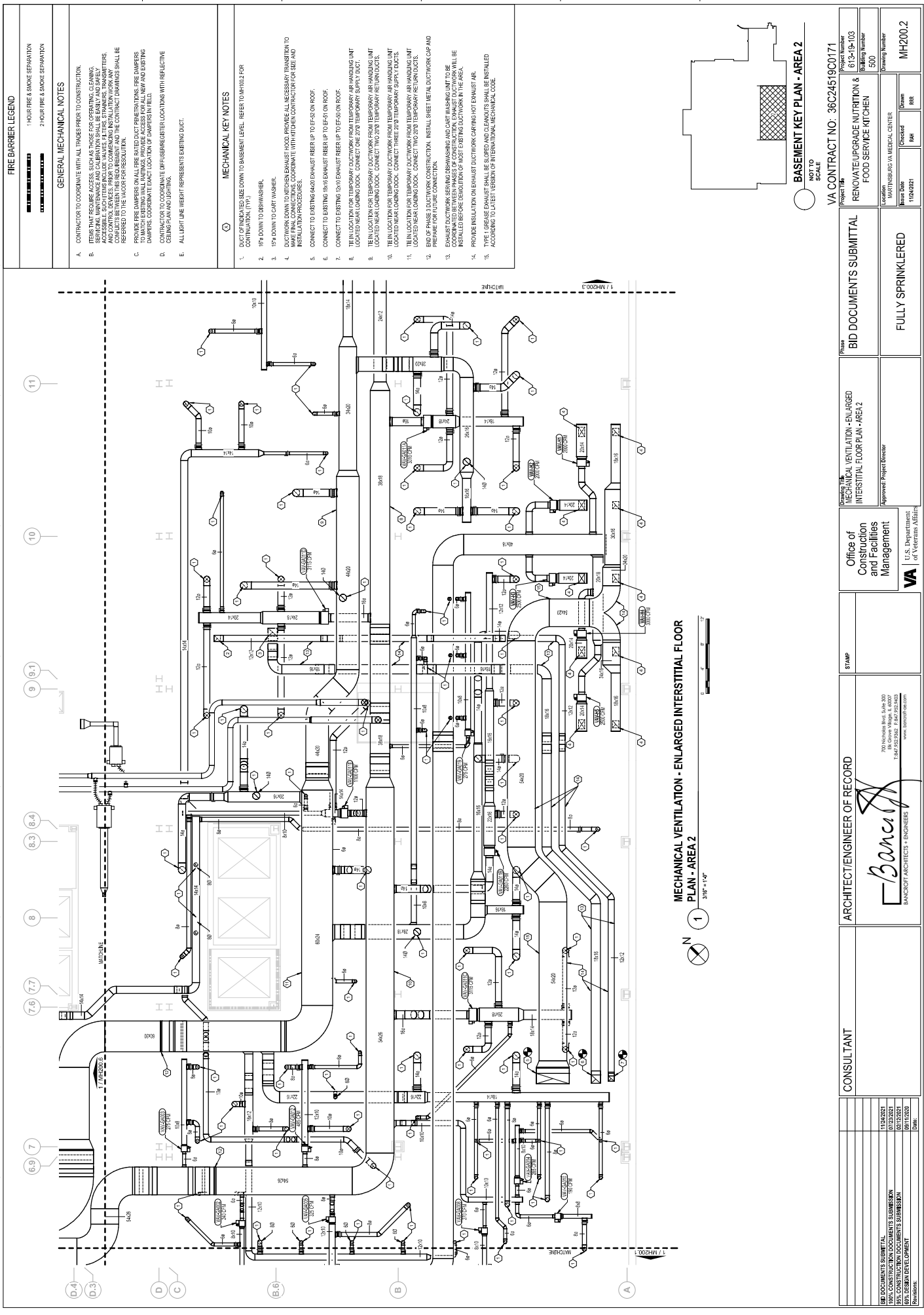
MECHANICAL

[illegible]



MECHANICAL VENTILATION - OVERALL ROOF PLAN

[illegible]

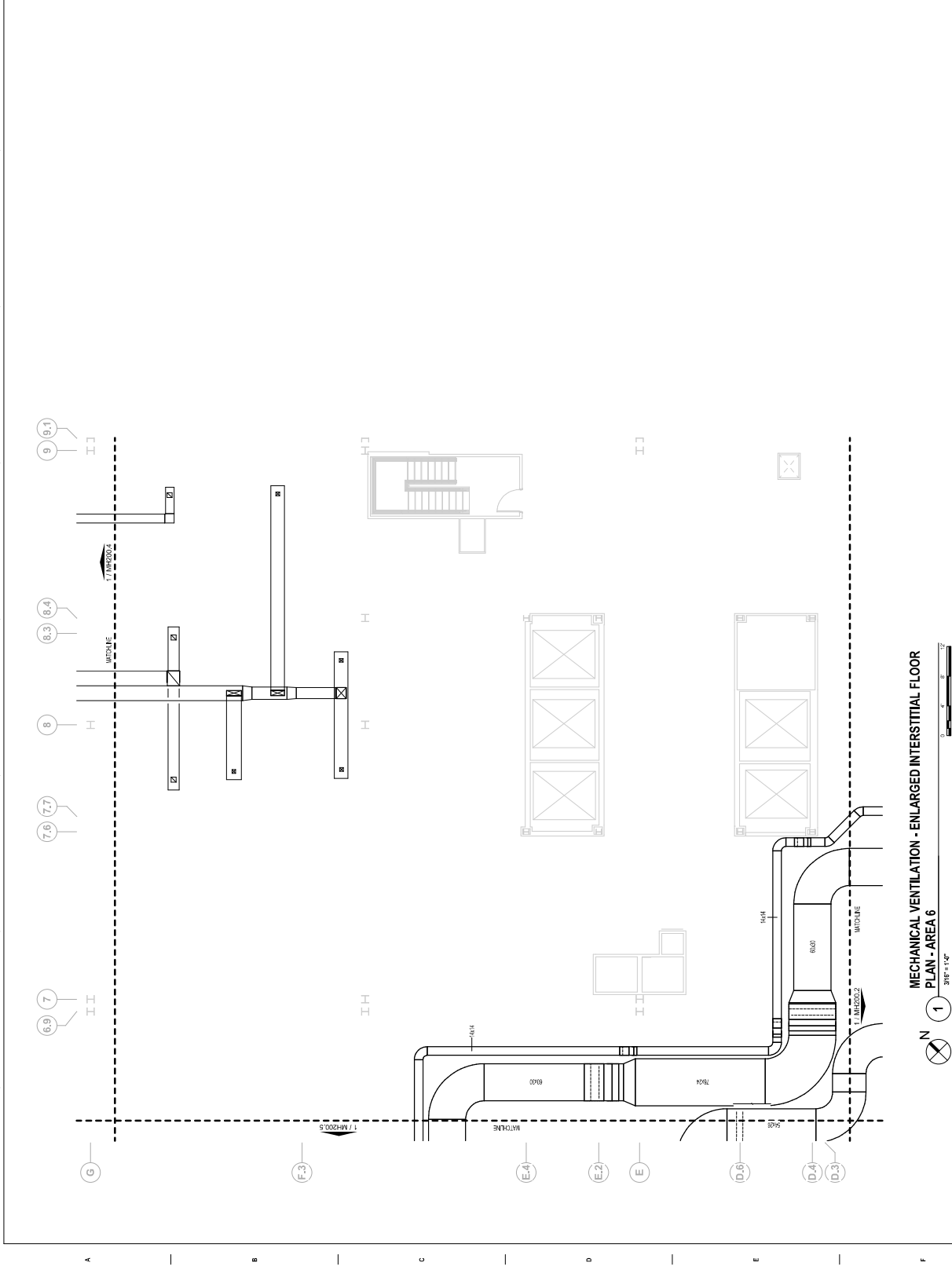


MECHANICAL VENTILATION - ENLARGED INTERSTITIAL FLOOR
PLAN - AREA 2
1/8" = 1'-0"

BASEMENT KEY PLAN - AREA 2
NOT TO SCALE

CONSULTANT		ARCHITECT/ENGINEER OF RECORD		STAMP		Office of Construction and Facilities Management		U.S. Department of Veterans Affairs	
BID DOCUMENTS SUBMITTAL		MECHANICAL VENTILATION - ENLARGED INTERSTITIAL FLOOR PLAN - AREA 2		Office of Construction and Facilities Management		U.S. Department of Veterans Affairs		U.S. Department of Veterans Affairs	
FULLY SPRINKLERED		FULLY SPRINKLERED		FULLY SPRINKLERED		FULLY SPRINKLERED		FULLY SPRINKLERED	
Project Title		Project Title		Project Title		Project Title		Project Title	
RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN	
Drawing Number		Drawing Number		Drawing Number		Drawing Number		Drawing Number	
MH200.2		MH200.2		MH200.2		MH200.2		MH200.2	
Revision		Revision		Revision		Revision		Revision	
1		1		1		1		1	
2		2		2		2		2	
3		3		3		3		3	
4		4		4		4		4	
5		5		5		5		5	
6		6		6		6		6	
7		7		7		7		7	
8		8		8		8		8	
9		9		9		9		9	
10		10		10		10		10	
11		11		11		11		11	

FIRE BARRIER LEGEND	
	1-HOUR FIRE & SMOKE SEPARATION
	2-HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL NOTES	
A. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.	
B. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, REPAIRS, AND MAINTENANCE, SHALL BE INDICATED BY ACCESS PANELS, ACCESSIBLE, SUCH THAT THEY INCLUDE VALVES, FLEXIBLE SPRINKLER TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, ANY ACCESS PANELS SHALL BE COORDINATED WITH THE CONTRACTOR. DAMPERS SHALL BE REFERRED TO THE VENDOR FOR RESOLUTION.	
C. PROVIDE FIRE DAMPERS ON ALL FIRE RATED DUCT PENETRATIONS. FIRE DAMPERS TO MATCH EXISTING WALL RATINGS. PROVIDE ACCESS FOR ALL NEW AND EXISTING DAMPERS. COORDINATE EXACT LOCATION OF DAMPERS IN FIELDS.	
D. CONTRACTOR TO COORDINATE DIFFUSERS/GRILL LOCATIONS WITH REFLECTIVE CEILING CAN AND LIGHTING.	
E. ALL LIGHT LINE WEIGHT REPRESENTS EXISTING DUCT.	
MECHANICAL KEY NOTES	
1. DUCT OF INDICATED SIZE DOWN TO BASEMENT LEVEL. REFER TO MH100 AND MH100.X SHEET'S FOR CONTINUATION (TYP.)	



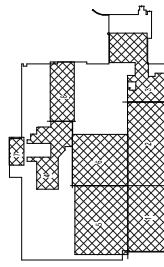
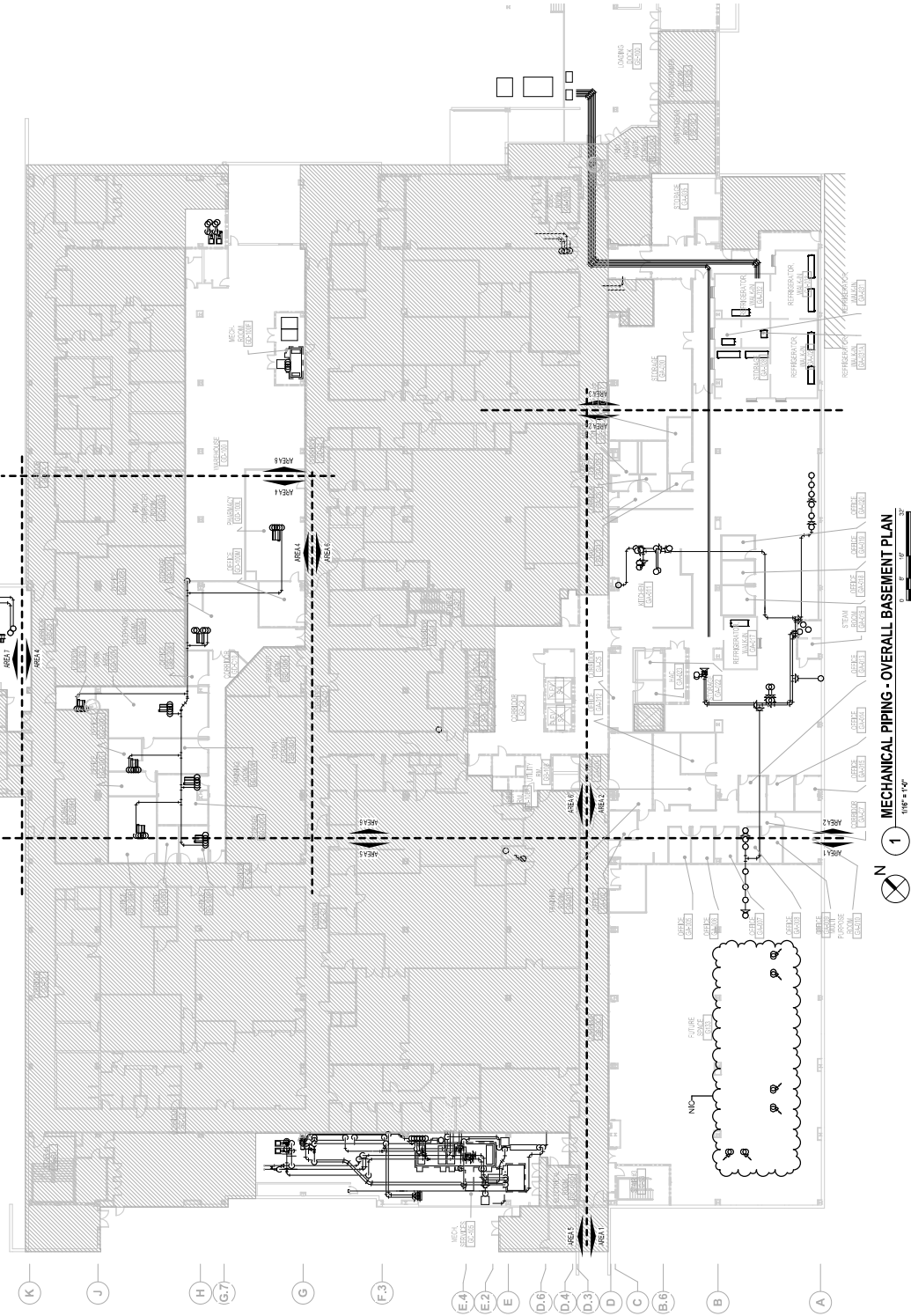
BASEMENT KEY PLAN - AREA 6	
	NOT TO SCALE
VA CONTRACT NO: 36C24519C0171	
Project Title	Project Number
RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN	613-19-103
Building Number	500
Location	Drawing Number
WASHINGTON, DC VA MEDICAL CENTER	MH200.6
Issue Date	Revised
11/04/2021	RRR

Office of Construction and Facilities Management	
U.S. Department of Veterans Affairs	
ARCHITECT/ENGINEER OF RECORD	
CONSULTANT	
STAMP	
MECHANICAL VENTILATION - ENLARGED INTERSTITIAL FLOOR PLAN - AREA 6	
Approved: Project Director	
Phase	
BID DOCUMENTS SUBMITTAL	
FULLY SPRINKLERED	
Project Title	
RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN	
Building Number	
500	
Location	
WASHINGTON, DC VA MEDICAL CENTER	
Issue Date	
11/04/2021	
Revised	
RRR	

[illegible]

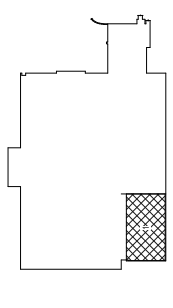
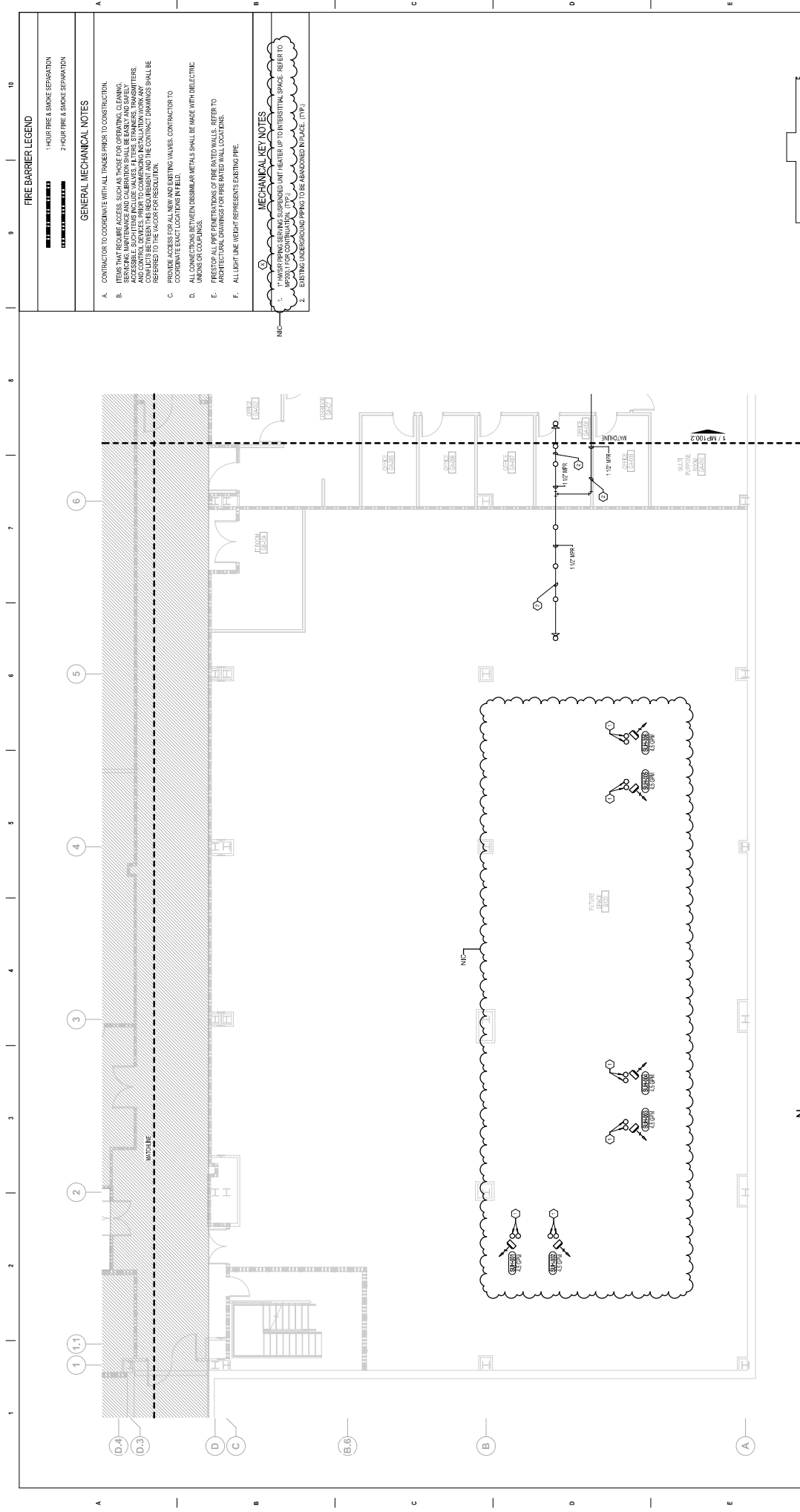
FIRE BARRIER LEGEND	
	1-HOUR FIRE & SMOKE SEPARATION
	2-HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL NOTES	
<p>A. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.</p> <p>B. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, MAINTENANCE, AND REPAIR, SHALL BE INDICATED BY ACCESS PANELS. ACCESSIBLE, SUCH ITEMS INCLUDE VALVES, FLEXIBLE STRAINERS, TRANSDUCERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION, WORKMAN SHALL BE REFERRED TO THE VENDOR FOR RESOLUTION.</p> <p>C. PROVIDE FIRE DAMPERS ON ALL FIRE RATED DUCT PENETRATIONS. FIRE DAMPERS TO MATCH EXISTING WALL RATINGS. PROVIDE ACCESS FOR ALL NEW AND EXISTING DAMPERS. COORDINATE EXACT LOCATION OF DAMPERS IN FILL.</p> <p>D. CONTRACTOR TO COORDINATE DIFFUSERS/REGISTER LOCATIONS WITH REFLECTIVE CEILING PLAN AND LIGHTING.</p> <p>E. ALL LIGHT LINE WEIGHT REPRESENTS EXISTING DUCT.</p>	

17 16 15.1 14 13 12 11 10 9.1 8.4 7.7 7 6.9 6 5 4 3 2 1 1.1



NOT TO SCALE

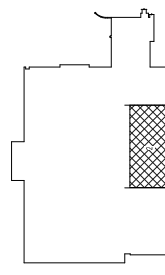
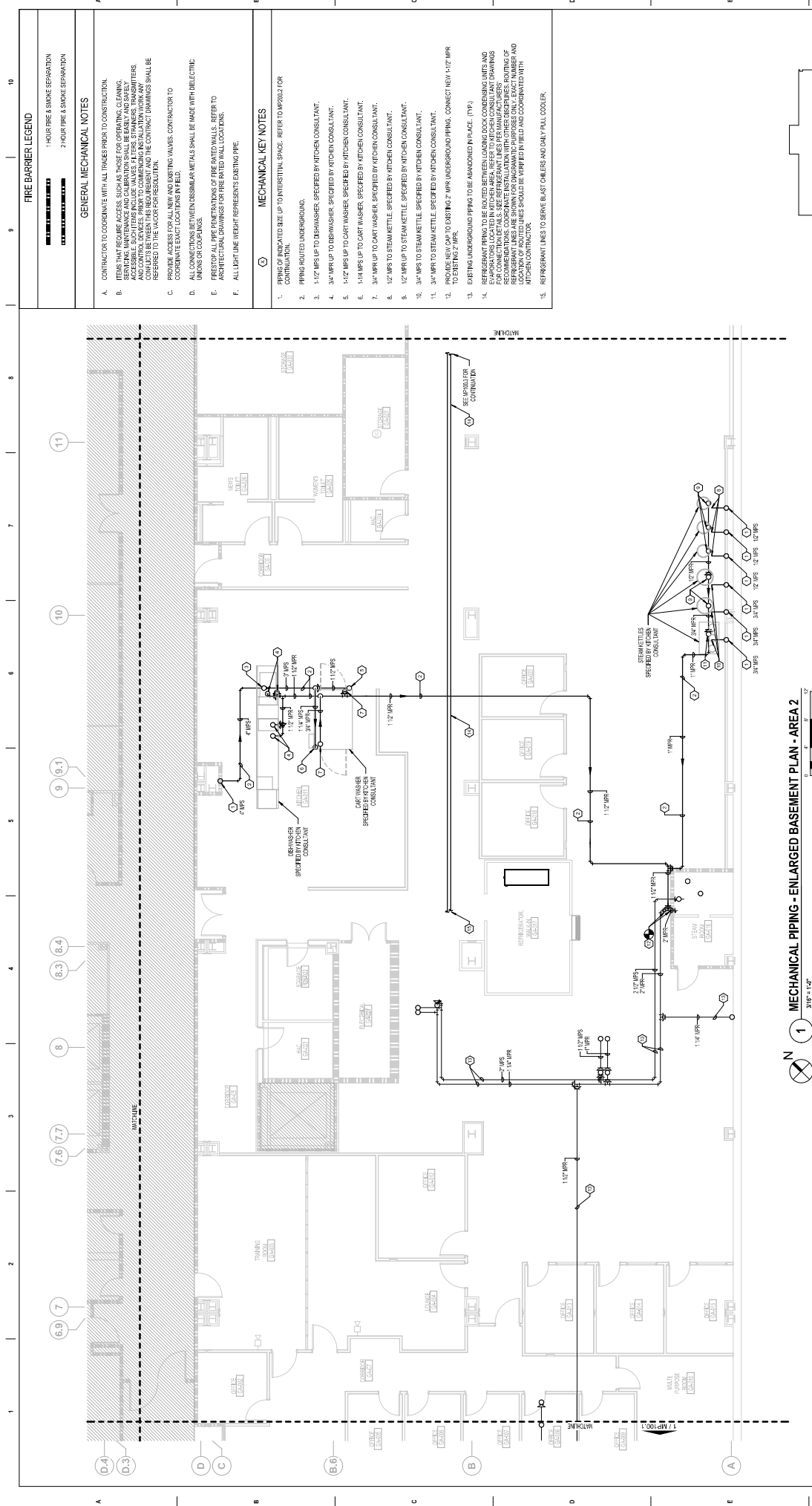
VA CONTRACT NO. 36C24519C0171 Project Title RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		Project Number 613-19-103	
Location KANSAS VA MEDICAL CENTER		Building Number 500	
Drawn JN		Drawing Number MP100	
Check JN		Approved JN	
Date 11/04/2021		Project Director JN	
Office of Construction and Facilities Management U.S. Department of Veterans Affairs		Phase BID DOCUMENTS SUBMITTAL	
STAMP 		CONSULTANT BANCRIFT ARCHITECTS + ENGINEERS	
ARCHITECT/ENGINEER OF RECORD BANCRIFT ARCHITECTS + ENGINEERS		MECHANICAL PIPING - OVERALL BASEMENT PLAN	
DATE 11/22/2021 07/22/2021 07/22/2021		FULLY SPRINKLERED	



NOT TO
SCALE

BASEMENT KEY PLAN - AREA 1

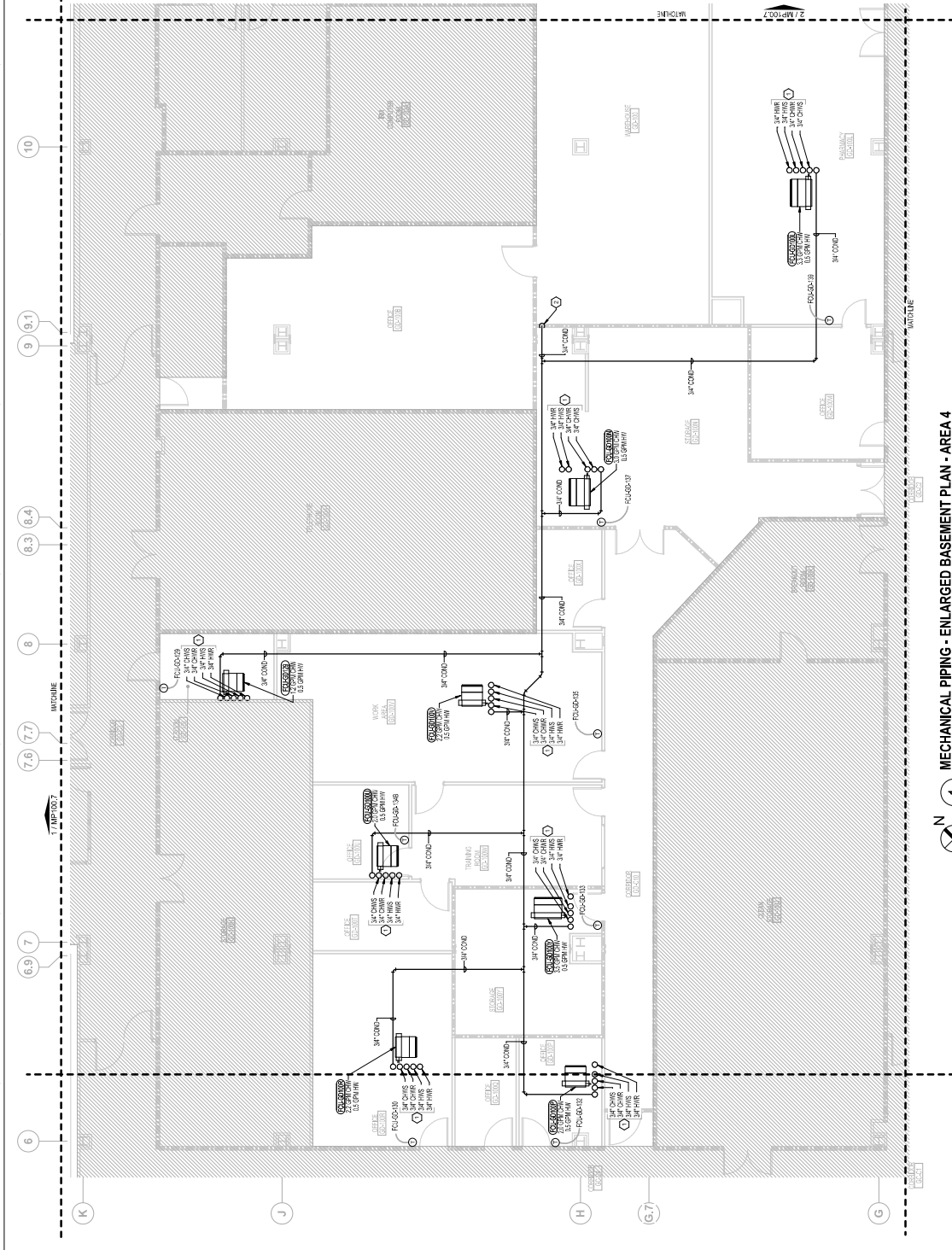
[illegible]



NOT TO
SCALE

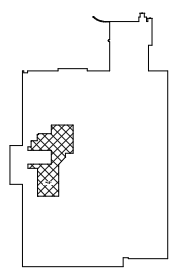
[illegible]

FIRE BARRIER LEGEND	
	1-HOUR FIRE & SMOKE SEPARATION
	2-HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL NOTES	
A. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.	
B. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, MAINTENANCE, AND REPAIR, SHALL BE INDICATED BY ACCESS PANELS. ACCESSIBLE, LOCKED, AND Labeled WITH THE TRADES, TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK, ANY ACCESS PANELS SHALL BE IDENTIFIED AND Labeled TO THE CONTRACT DRAWINGS SHALL BE REFERRED TO THE VENDOR FOR RESOLUTION.	
C. PROVIDE ACCESS FOR ALL NEW AND EXISTING VALVES. CONTRACTOR TO COORDINATE EXACT LOCATIONS IN FIELD.	
D. ALL CONNECTIONS BETWEEN DISJUNCTURE METALS SHALL BE MADE WITH DIELECTRIC UNIONS OR COUPLERS.	
E. FIRESTOP ALL PENETRATIONS OF FIRE RATED WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALL LOCATIONS.	
F. ALL LIGHT LINE WEIGHT REPRESENTS EXISTING PIPE.	
MECHANICAL KEY NOTES	
1. PIPING ON UNFACED PARTS OF EXISTING FACED UNIT UP TO INTERSTITIAL SPACE. REFER TO MPP04 FOR CONTINUATION. (TYP.)	
2. 3/4" CONDENSATE DRIVING DOWN THE IN WITH PLUMBING SANITARY PIPING. REFER TO PLUMBING DRAWINGS FOR EXACT LOCATION OF SANITARY PIPING.	



1 MECHANICAL PIPING - ENLARGED BASEMENT PLAN - AREA 4

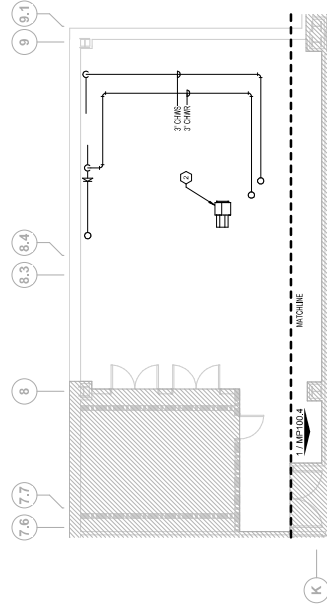
3/16" = 1'-0"



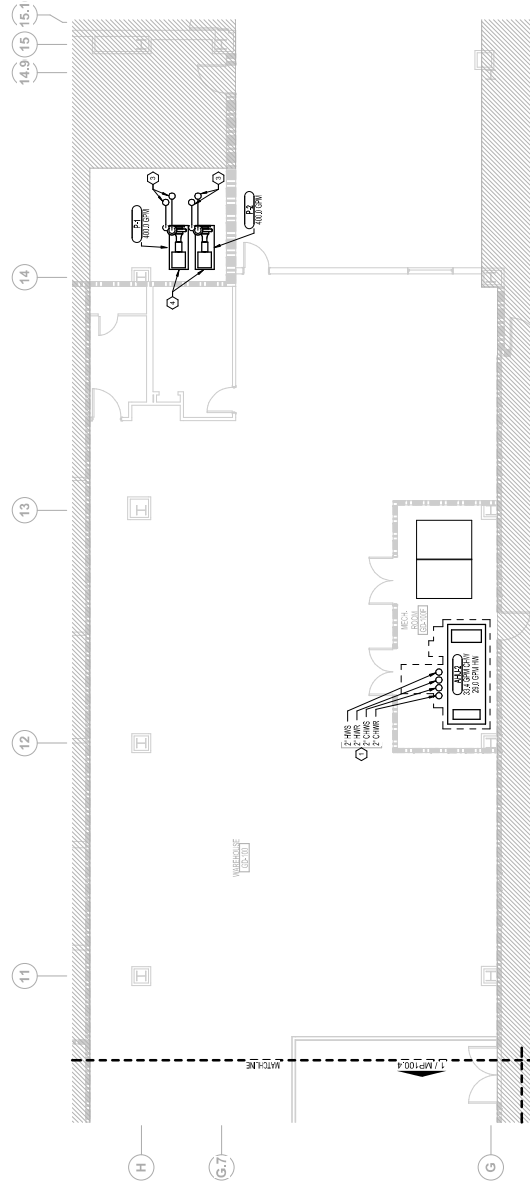
BASEMENT KEY PLAN - AREA 4



1/8" = 1'-0"

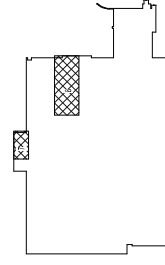
VA CONTRACT NO. 36C24519C0171		Project Title	
RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		Project Number	
500		Building Number	
Drawing Number		Drawing Number	
MP100.4		Drawing Number	
Location		Location	
NATIONAL VA MEDICAL CENTER		NATIONAL VA MEDICAL CENTER	
Revision Date		Revision Date	
11/06/2021		11/06/2021	
Revision		Revision	
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	
10		10	
11		11	
12		12	
13		13	
14		14	
15		15	
16		16	
17		17	
18		18	
19		19	
20		20	
21		21	
22		22	
23		23	
24		24	
25		25	
26		26	
27		27	
28		28	
29		29	
30		30	
31		31	
32		32	
33		33	
34		34	
35		35	
36		36	
37		37	
38		38	
39		39	
40		40	
41		41	
42		42	
43		43	
44		44	
45		45	
46		46	
47		47	
48		48	
49		49	
50		50	
51		51	
52		52	
53		53	
54		54	
55		55	
56		56	
57		57	
58		58	
59		59	
60		60	
61		61	
62		62	
63		63	
64		64	
65		65	
66		66	
67		67	
68		68	
69		69	
70		70	
71		71	
72		72	
73		73	
74		74	
75		75	
76		76	
77		77	
78		78	
79		79	
80		80	
81		81	
82		82	
83		83	
84		84	
85		85	
86		86	
87		87	
88		88	
89		89	
90		90	
91		91	
92		92	
93		93	
94		94	
95		95	
96		96	
97		97	
98		98	
99		99	
100		100	
101		101	
102		102	
103		103	
104		104	
105		105	
106		106	
107		107	
108		108	
109		109	
110		110	
111		111	
112		112	
113		113	
114		114	
115		115	
116		116	
117		117	
118		118	
119		119	
120		120	
121		121	
122		122	
123		123	
124		124	
125		125	
126		126	
127		127	
128		128	
129		129	
130		130	
131		131	
132		132	
133		133	
134		134	
135		135	
136		136	
137		137	
138		138	
139		139	
140		140	
141		141	
142		142	
143		143	
144		144	
145		145	
146		146	
147		147	
148		148	
149		149	
150		150	
151		151	
152		152	
153		153	
154		154	
155		155	
156		156	
157		157	
158		158	
159		159	
160		160	
161		161	
162		162	
163		163	
164		164	
165		165	
166		166	
167		167	
168		168	
169		169	
170		170	
171		171	
172		172	
173		173	
174		174	
175		175	
176		176	
177		177	
178		178	
179		179	
180		180	
181		181	
182		182	
183		183	
184		184	
185		185	
186		186	
187		187	
188		188	
189		189	
190		190	
191		191	
192		192	
193		193	
194		194	
195		195	
196		196	
197		197	
198		198	
199		199	
200		200	
201		201	
202		202	
203		203	
204		204	
205		205	
206		206	
207		207	
208		208	
209		209	
210		210	
211		211	
212		212	
213		213	
214		214	
215		215	
216		216	
217		217	
218		218	
219		219	
220		220	
221		221	
222		222	
223		223	
224		224	
225		225	
226		226	
227		227	
228		228	
229		229	
230		230	
231		231	
232		232	
233		233	
234		234	
235		235	
236		236	
237		237	
238		238	
239		239	
240		240	
241		241	
242		242	
243		243	
244		244	
245		245	
246		246	
247		247	
248		248	
249		249	
250		250	
251		251	
252		252	
253		253	
254		254	
255		255	
256		256	
257		257	
258		258	
259		259	
260		260	
261		261	
262		262	
263		263	
264		264	
265		265	
266		266	
267		267	
268		268	
269		269	
270		270	
271		271	
272		272	
273		273	
274		274	
275		275	
276		276	
277		277	
278		278	
279		279	
280		280	
281		281	
282		282	
283		283	
284		284	
285		285	
286		286	
287		287	
288		288	
289		289	
290		290	
291		291	
292		292	
293		293	
294		294	
295		295	
296		296	
297		297	
298		298	
299		299	
300		300	
301		301	
302		302	
303		303	
304		304	
305		305	
306		306	
307		307	
308		308	
309		309	
310		310	
311		311	
312		312	
313		313	
314		314	
315		315	
316		316	
317		317	
318		318	
319		319	
320		320	
321		321	
322		322	
323		323	
324		324	
325		325	
326		326	
327		327	
328		328	
329		329	
330		330	
331		331	
332		332	
333		333	
334		334	
335		335	
336		336	
337		337	
338		338	
339		339	
340		340	
341		341	
342		342	
343		343	
344		344	
345		345	
346		346	
347		347	
348		348	
349		349	
350		350	
351		351	
352		352	
353		353	
354		354	
355		355	
356		356	
357		357	
358		358	
359		359	
360		360	
361		361	
362		362	
363		363	
364		364	
365		365	
366		366	
367		367	
368		368	
369		369	
370		370	
371		371	
372		372	
373		373	
374		374	
375		375	
376		376	
377		377	
378		378	
379		379	
380		380	
381		381	
382		382	
383		383	
384		384	
385		385	
386		386	
387		387	
388		388	
389		389	
390		390	
391		391	
392		392	
393		393	
394		394	
395		395	
396		396	
397		397	
398		398	
399		399	
400		400	
401		401	
402		402	
403		403	
404		404	
405		405	
406		406	
407		407	
408		408	
409		409	
410		410	
411		411	
412		412	
413		413	
414		414	
415		415	
416		416	
417		417	
418		418	
419		419	
420		420	
421		421	
422		422	
423		423	
424		424	
425		425	
426		426	
427		427	
428		428	
429		429	
430		430	
431		431	
432		432	
433		433	
434		434	
435		435	
436		436	
437		437	
438		438	
439		439	
440		440	
441		441	
442		442	
443		443	
444		444	
445		445	
446		446	
447		447	
448		448	
449		449	
450		450	
451		451	
452		452	
453		453	
454		454	
455		455	
456		456	
457		457	
458		458	
459		459	
460		460	
461		461	
462		462	
463		463	
464		464	
465		465	
466		466	
467		467	
468		468	
469		469	
470		470	
471		471	
472		472	
473		473	



MECHANICAL PIPING - ENLARGED BASEMENT PLAN - AREA 7



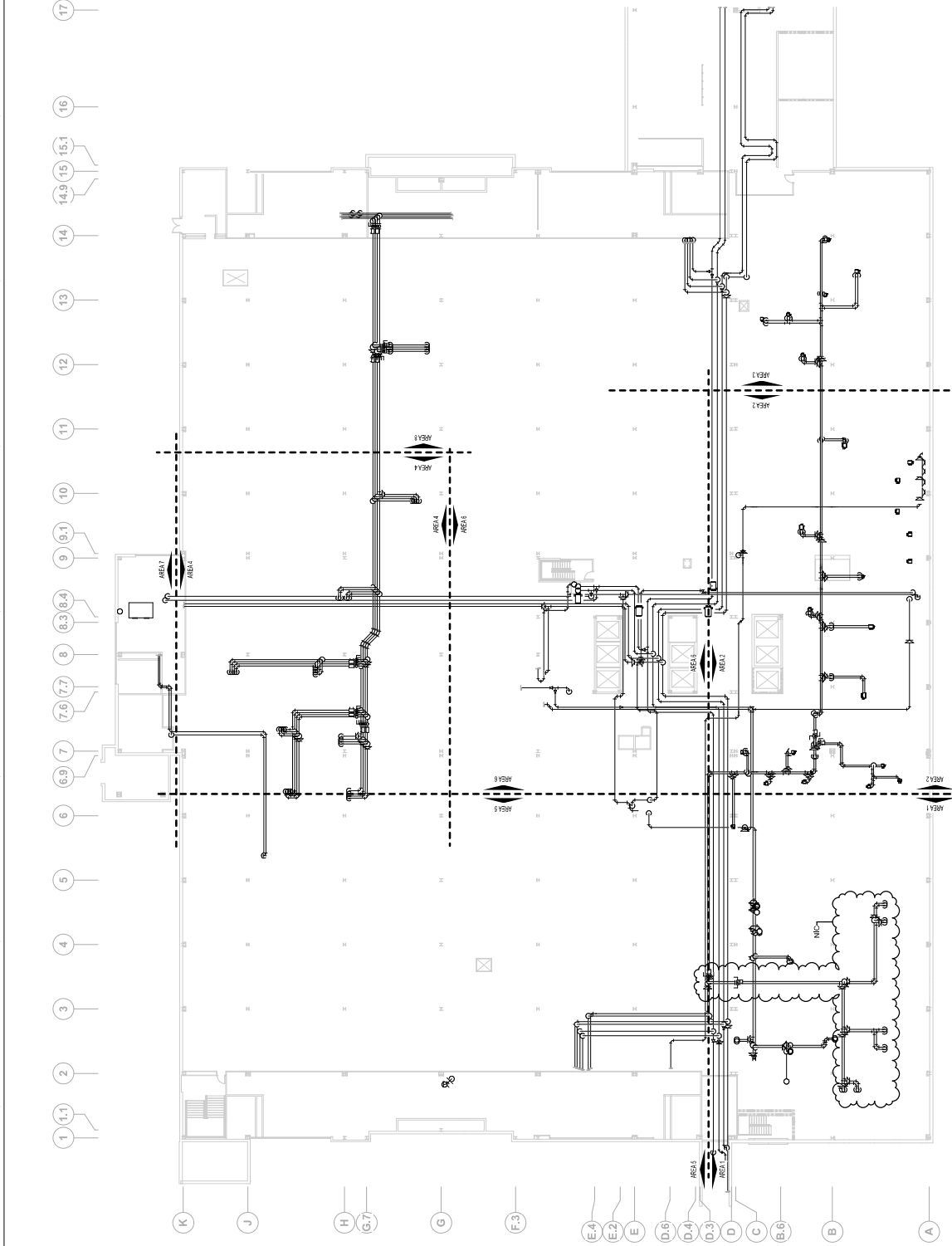
N  2  MECHANICAL PIPING - ENLARGED BASEMENT PLAN - AREA 8
3/16" = 1'-0"



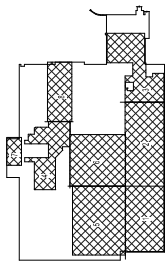
☐ BASEMENT KEY PLAN - AREA 7 & 8

[illegible]

FIRE BARRIER LEGEND	
	1-HOUR FIRE & SMOKE SEPARATION
	2-HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL NOTES	
<p>A. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.</p> <p>B. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, REPAIRS AND MAINTENANCE, SHALL BE IDENTIFIED AND ACCESS SHALL BE MAINTAINED ACCESSIBLE. SUCH ITEMS INCLUDE VALVES, FLANGES, TRANSDUCERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION, WORK SHALL BE REFERRED TO THE VENDOR FOR RESOLUTION.</p> <p>C. PROVIDE ACCESS FOR ALL NEW AND EXISTING VALVES. CONTRACTOR TO COORDINATE EXACT LOCATIONS IN FIELD.</p> <p>D. ALL CONNECTIONS BETWEEN DISSIMILAR METALS SHALL BE MADE WITH DIELECTRIC UNIONS OR COUPLERS.</p> <p>E. FIRESTOP ALL PIPE PENETRATIONS OF FIRE RATED WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALL LOCATIONS.</p> <p>F. ALL LIGHT LINE WEIGHT REPRESENTS EXISTING PIPE.</p>	

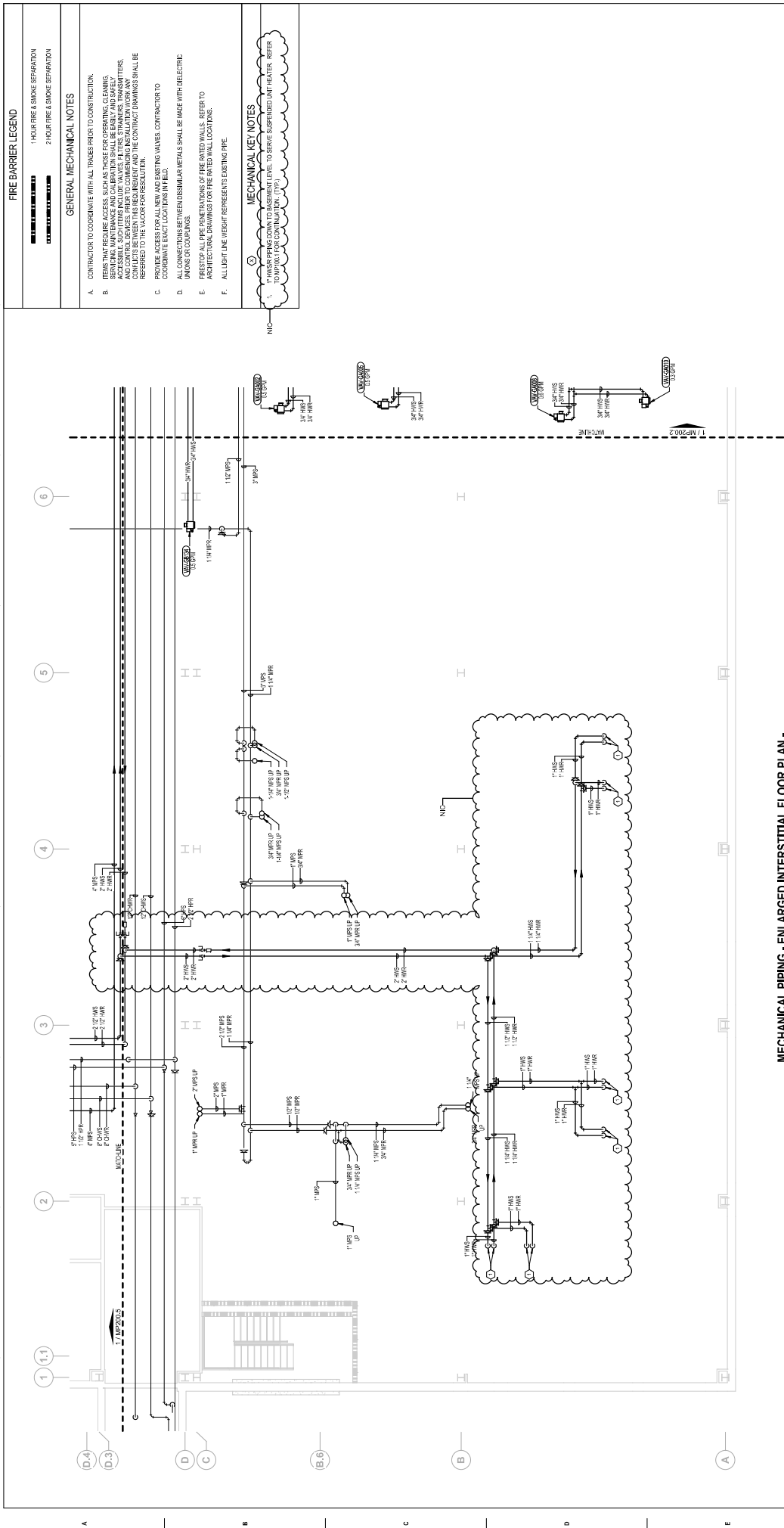


1 MECHANICAL PIPING - OVERALL INTERSTITIAL FLOOR PLAN
1/8" = 1'-0"



BASEMENT KEY PLAN
NOT TO SCALE

PROJECT NO. 36C24519C0171 PROJECT TITLE RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		PROJECT NUMBER 613-19-103 BUILDING NUMBER 500	
LOCATION WATKINSBURG VA MEDICAL CENTER		DRAWING NUMBER MP200	
DATE 11/04/2021		DESIGNED BY JN	
CHECKED BY JN		APPROVED BY JN	
OFFICE OF CONSTRUCTION AND FACILITIES MANAGEMENT U.S. DEPARTMENT OF VETERANS AFFAIRS		PHASE BID DOCUMENTS SUBMITTAL	
ARCHITECT/ENGINEER OF RECORD BANCROFT ARCHITECTS + ENGINEERS 1000 VICTORY BLVD., SUITE 200 1800 COMMONWEALTH BLVD., SUITE 200 1100 COMMONWEALTH BLVD., SUITE 200 1100 COMMONWEALTH BLVD., SUITE 200 1100 COMMONWEALTH BLVD., SUITE 200		MECHANICAL PIPING - OVERALL INTERSTITIAL FLOOR PLAN	
CONSULTANT		FULLY SPRINKLERED	



MECHANICAL PIPING - ENLARGED INTERSTITIAL FLOOR PLAN - AREA 1

3/8\"/>



1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

59

60

61

62

63

64

65

66

67

68

69

70

71

72

73

74

75

76

77

78

79

80

81

82

83

84

85

86

87

88

89

90

91

92

93

94

95

96

97

98

99

100

101

102

103

104

105

106

107

108

109

110

111

112

113

114

115

116

117

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

139

140

141

142

143

144

145

146

147

148

149

150

151

152

153

154

155

156

157

158

159

160

161

162

163

164

165

166

167

168

169

170

171

172

173

174

175

176

177

178

179

180

181

182

183

184

185

186

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

217

218

219

220

221

222

223

224

225

226

227

228

229

230

231

232

233

234

235

236

237

238

239

240

241

242

243

244

245

246

247

248

249

250

251

252

253

254

255

256

257

258

259

260

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

286

287

288

289

290

291

292

293

294

295

296

297

298

299

300

301

302

303

304

305

306

307

308

309

310

311

312

313

314

315

316

317

318

319

320

321

322

323

324

325

326

327

328

329

330

331

332

333

334

335

336

337

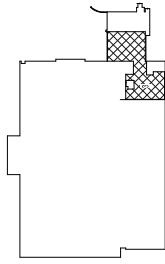
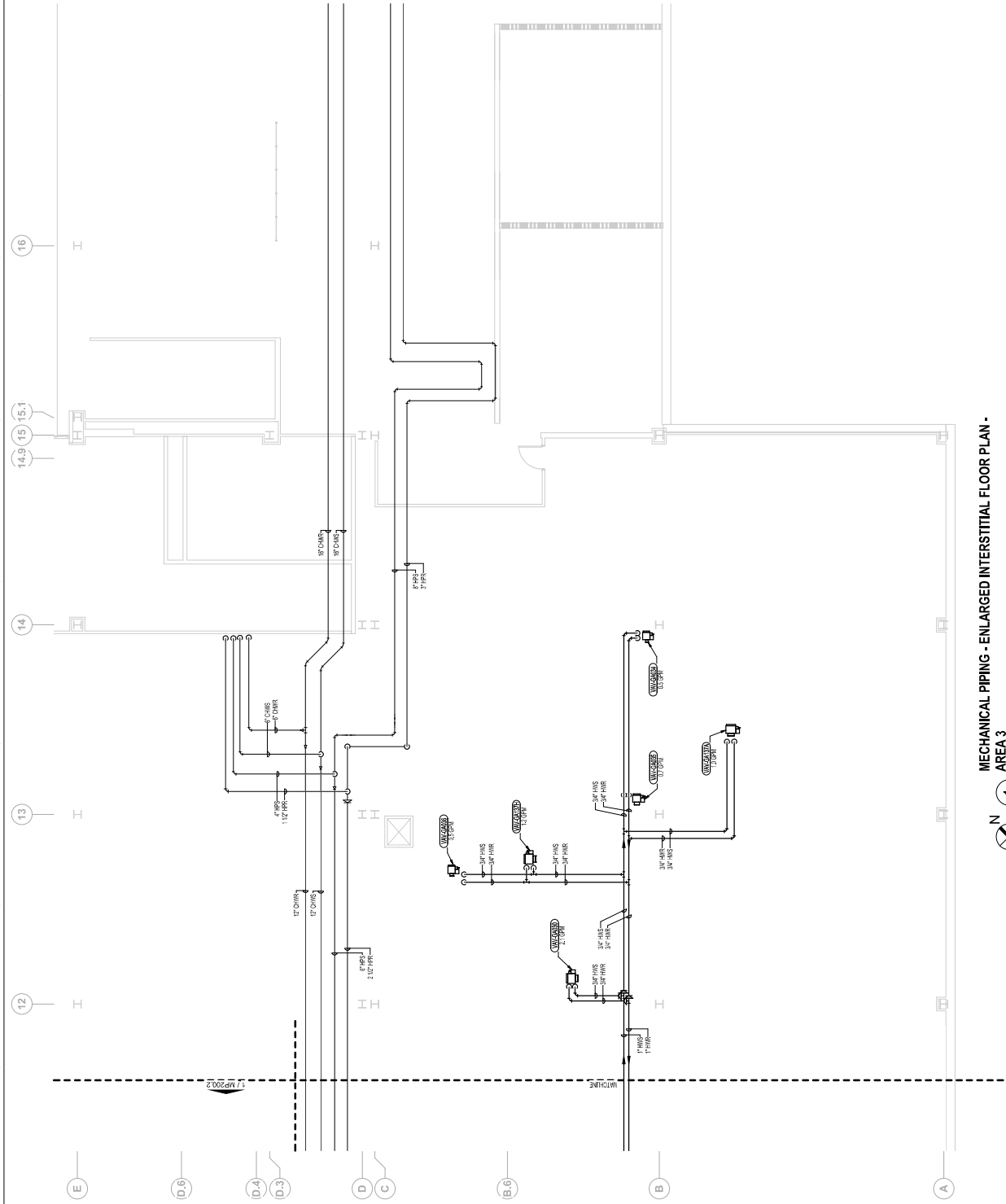
338

339

340

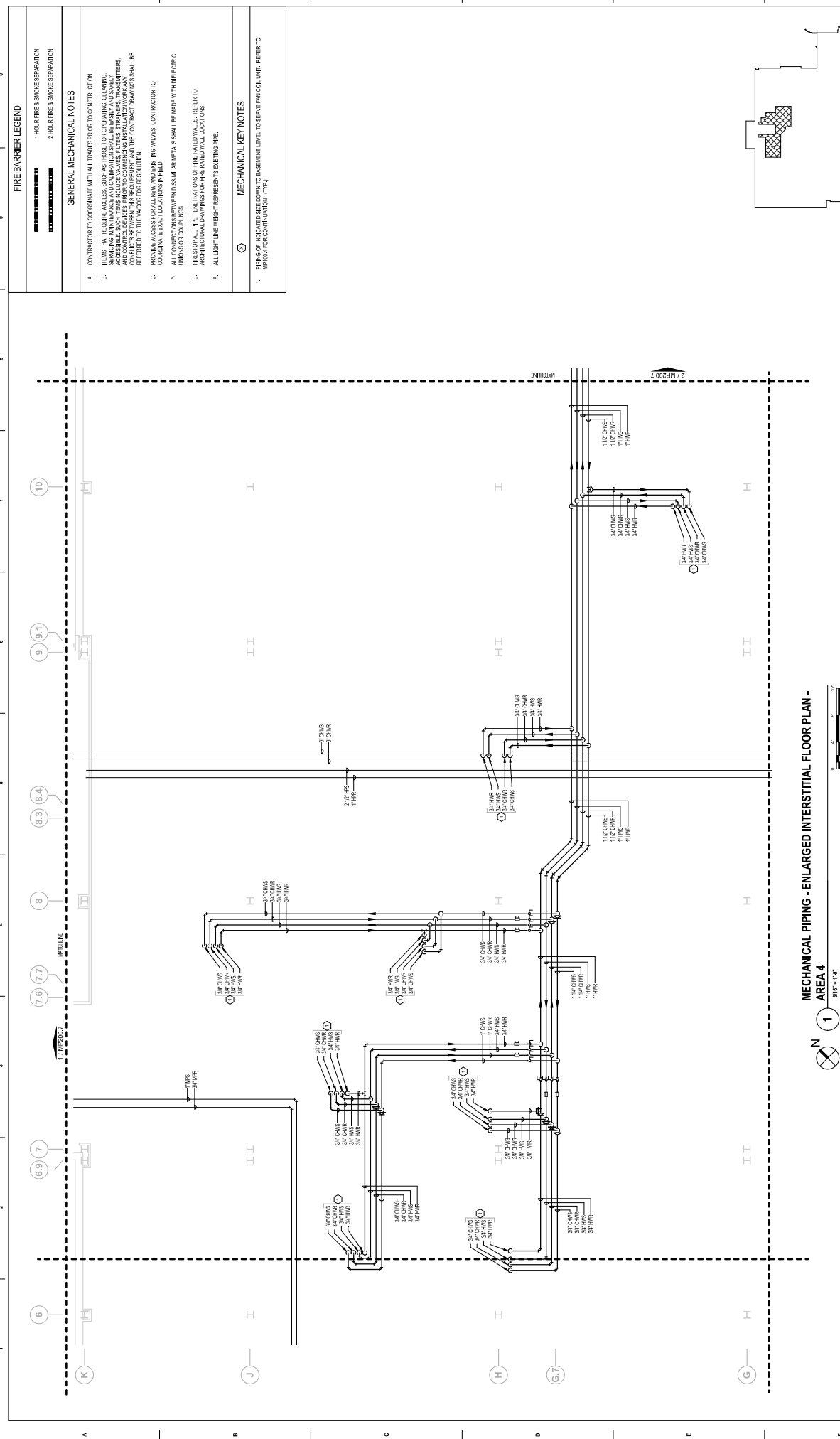
341

FIRE BARRIER LEGEND	
	1-HOUR FIRE & SMOKE SEPARATION
	2-HOUR FIRE & SMOKE SEPARATION
GENERAL MECHANICAL NOTES	
<p>A. CONTRACTOR TO COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.</p> <p>B. ITEMS THAT REQUIRE ACCESS, SUCH AS THOSE FOR OPERATING, CLEANING, REPAIRS, MAINTENANCE, AND INSPECTION, SHALL BE INDICATED BY ACCESSIBLE, LOCKED, AND Labeled VALVES, 1 1/2" FIC, SPRINKLER TRANSMITTERS, AND CONTROL DEVICES. PRIOR TO COMMENCING INSTALLATION WORK ANY ACCESS TO THE VACUUM SHALL BE INDICATED BY THE CONTRACT DRAWINGS SHALL BE REFERRED TO THE VACUUM FOR RESOLUTION.</p> <p>C. PROVIDE ACCESS FOR ALL NEW AND EXISTING VALVES. CONTRACTOR TO COORDINATE EXACT LOCATIONS IN FIELD.</p> <p>D. ALL CONNECTIONS BETWEEN DISJUNCTURE METALS SHALL BE MADE WITH DIELECTRIC UNION OR COUPLERS.</p> <p>E. FIRESTOP ALL PIPE PENETRATIONS OF FIRE RATED WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATED WALL LOCATIONS.</p> <p>F. ALL LIGHT LINE WEIGHT REPRESENTS EXISTING PIPE.</p>	

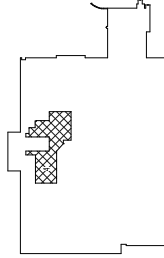


BASEMENT KEY PLAN - AREA 3
NOT TO SCALE

VA CONTRACT NO: 36C24519C0171 Project Title RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		Project Number 613-19-103	
Phase BID DOCUMENTS SUBMITTAL		Building Number 500	
Office of Construction and Facilities Management U.S. Department of Veterans Affairs		Drawing Number MP200.3	
Architect/Engineer of Record BANCROFT ARCHITECTS + ENGINEERS 1000 Technology Blvd., Suite 200 St. Louis, MO 63103 T: 314.782.2342 F: 314.782.4424 www.bancroft-ae.com		Location KANTINS/RSIC VA MEDICAL CENTER	
Consultant		Revision 1 11/22/2021 07/22/2021 07/22/2021	
Submittal 100% CONSTRUCTION DOCUMENTS SUBMISSION 90% CONSTRUCTION DOCUMENTS SUBMISSION 75% CONSTRUCTION DOCUMENTS SUBMISSION		Drawn JN Checked RM Approved JN	



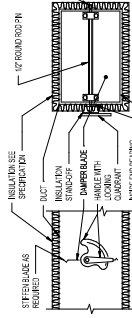
**MECHANICAL PIPING - ENLARGED INTERSTITIAL FLOOR PLAN -
AREA 4**



BASEMENT KEY PLAN - AREA 4

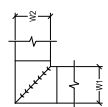
[illegible]





NOTE:

1. 01
2. 01
- 00



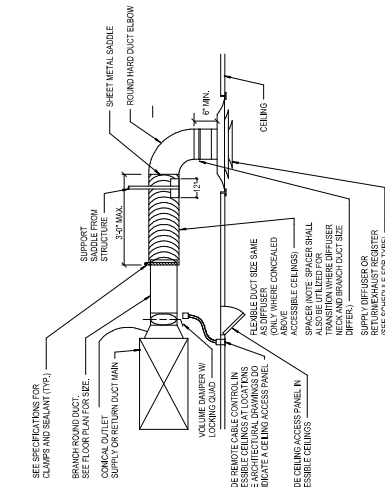
NOTE:

1. ALL
2. WH
3. ALL
4. WH

- NOTE:**
1. ALL VANE ELBOWS SHALL BE CONSTRUCTED AND INSTALLED AS DETAILED BY SMOENA.
 2. WHEN W1 DOES NOT EQUAL W2, VANE SHALL BE SINGLE THICKNESS VANE TYPE REGARDLESS OF W DIMENSION.
 3. ALL SINGLE THICKNESS VANES SHALL HAVE A 2" RADIUS, 1 1/2" MAXIMUM SPACE BETWEEN VANES AND A 3/4" TRAIL
 4. WHEN W EQUALS W2 AND W1 IS GREATER THAN 20" VANES SHALL BE DOUBLE VANE TYPE.

4 VOLUME DAMPER DETAIL

NOT TO SCALE

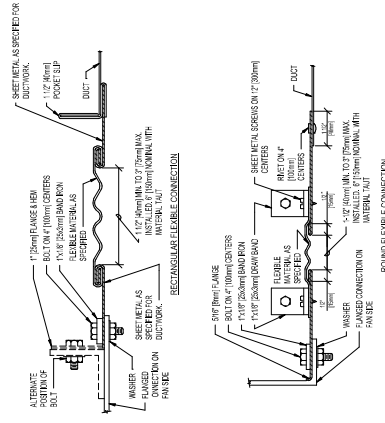


DIFFUSER INSTALLATION

NOT TO
SCALE

3 DUCTWORK SQUARE VANE ELBOWS

NOT TO
CONT.

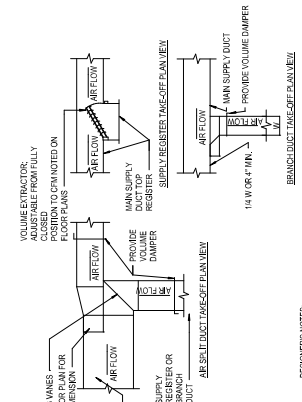


FLEXIBLE DUCT CONNECTIONS

NOT TO
SCALE

2 EXHAUST OR RETURN BRANCH DUCTWORK

NOT TO
SCALE

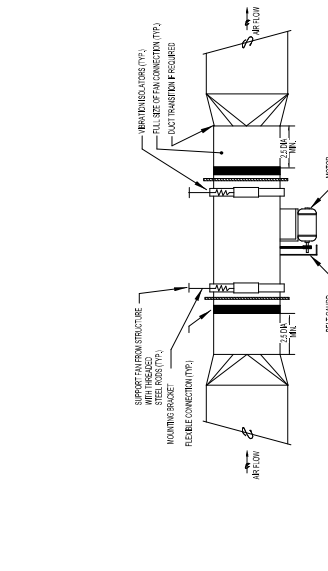


DESIGNER'S NOTES:

1. THE SUPPLY REGISTER TAKE-OFF MAY BE USED FOR UP TO 25% OF THE MAIN DUCT CFM. THE BRANCH DUCT TAKE-OFF MAY BE USED FOR UP TO 15% OF THE MAIN DUCT CFM/TIME AND UP TO 40% WHEN THE MAIN DUCT VELOCITY IS 1000 FPM (1.4) OR LESS. THE AIR SPLIT DUCT TAKE-OFF SHALL BE USED IN ALL OTHER CASES AND MAY BE USED AT ANYTIME.
2. SHOW ALL VOLUME DAMPERS ON FLOOR PLANS.

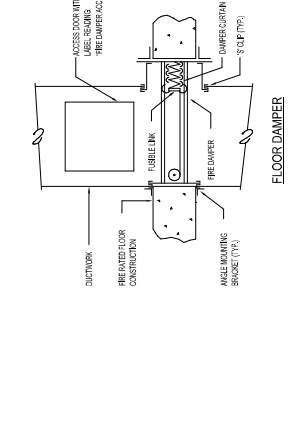
6 DUCTWORK - TAKEOFF

NOT TO SCALE



11 IN-LINE EXHAUST FAN

NOT TO
SCALE



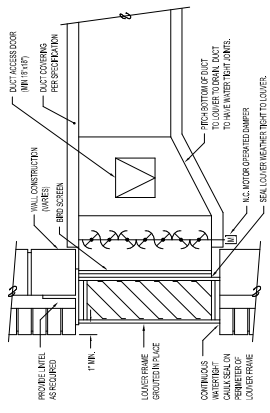
10 FIRE DAMPER

SCALE

NOTES:

1. ACCESS DOORS TO BE SEELLOCATED SUCH THAT RESETTING FIRE DAMPER LINK CAN BE ACCOMPLISHED IN ACCESS DOOR.
2. MINIMUM SIZE IS 12"X12". PROVIDE MULTIPLE ACCESS DOORS AT WIDE DUCTS.
3. COORDINATE GENERAL CONTRACTOR FURNISHED INSTALLED WALL OR CEILING ACCESS PANELS REQUIRED AT OTHER INACCESSIBLE LOCATIONS.

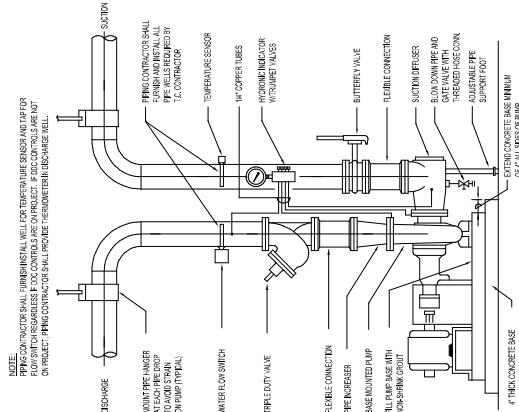
5 DUCTWORK RADIUS ELBOWS

NOT TO
SCALE

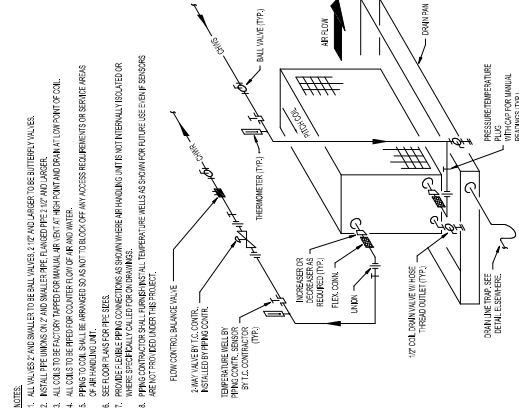
9 DUCT CONNECTION TO WALL LOUVER

NOT TO SCALE

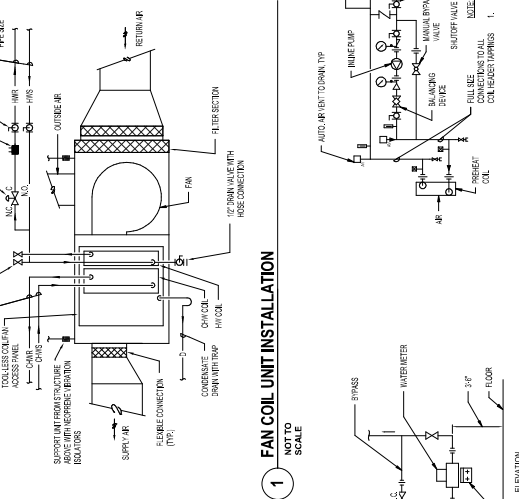
[illegible]



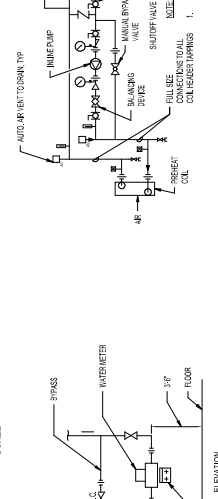
5 BASE MOUNTED PUMP
NOT TO SCALE



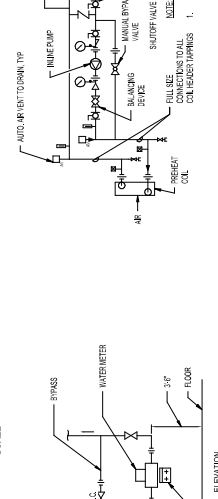
4 CHILLED WATER COIL 2-WAY VALVE PIPING
NOT TO SCALE



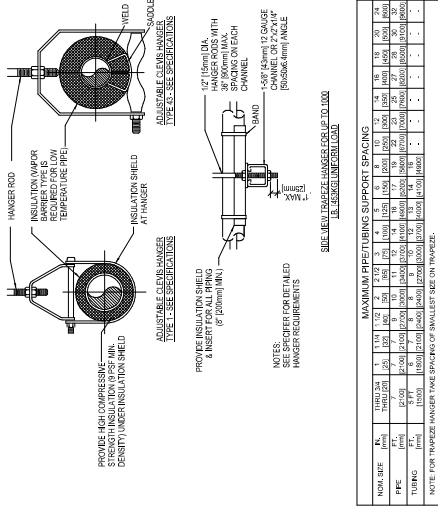
1 FAN COIL UNIT INSTALLATION
NOT TO SCALE



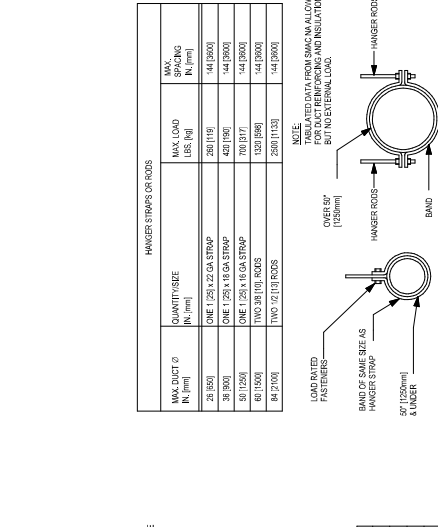
3 WATER METER INSTALLATION
NOT TO SCALE



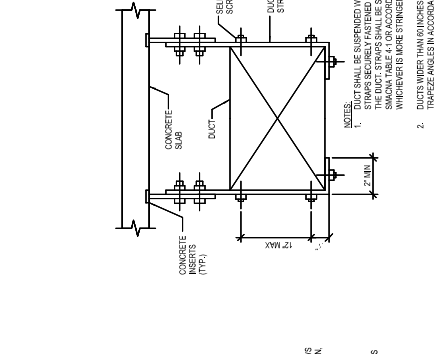
2 HOT WATER PREHEAT COIL PIPING CONNECTIONS
NOT TO SCALE



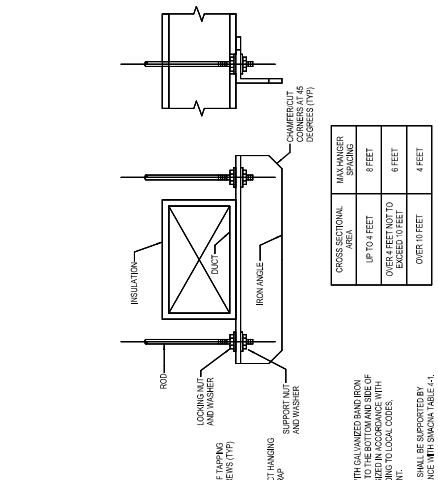
8 PIPE HANGER DETAIL
NOT TO SCALE



7 ROUND DUCT HANGER DETAIL
NOT TO SCALE

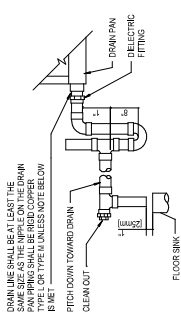


6 RECTANGULAR DUCT INSTALLATION DETAIL
NOT TO SCALE



2 HOT WATER PREHEAT COIL PIPING CONNECTIONS
NOT TO SCALE

VA CONTRACT NO. 36C24519C0171 Project Title: RENOVATE/UPGRADE NUTRITION & FOOD SERVICE KITCHEN		Project Number: 613-19-103 Building Number: 500	
Drawing Number: M503		Location: WATSON/IRIS VA MEDICAL CENTER	
Date: 11/04/2021		Drawn: NR	
Checked: NR		Approved: Project Director	
Office of Construction and Facilities Management		U.S. Department of Veterans Affairs	
ARCHITECT/ENGINEER OF RECORD		STAMP	
CONSULTANT		ARCHITECT/ENGINEER OF RECORD	
BID DOCUMENTS SUBMITTAL		MECHANICAL DETAILS	
FULLY SPRINKLERED		BID DOCUMENTS SUBMITTAL	



DRAIN LINE SHALL BE AT LEAST THE SAME SIZE AS THE INPILE ON THE DRAIN TRAP OR TYPE A UNLESS NOTE BELOW

NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

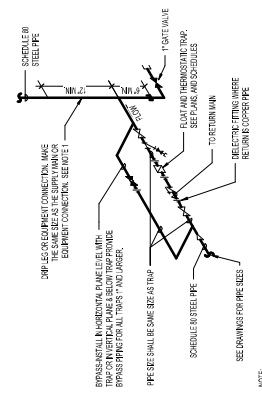
DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

4 AIR HANDLING UNIT DRAIN TRAP



NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

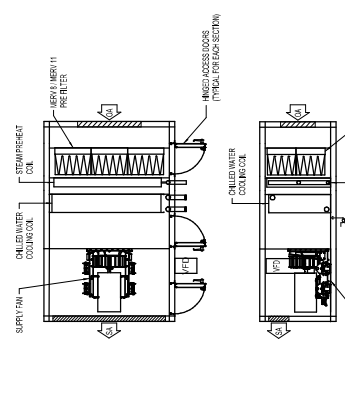
DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

5 FLOAT AND THERMOSTATIC STEAM TRAP ASSEMBLY



NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

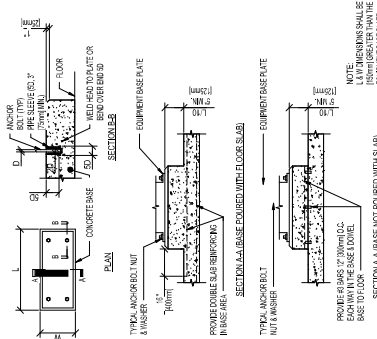
DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

6 AIR HANDLING UNIT DETAIL (MAU-1)

7 AIR HANDLING UNIT DETAIL (AHU-2)

8 AIR HANDLING UNIT DETAIL (AHU-1)



NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

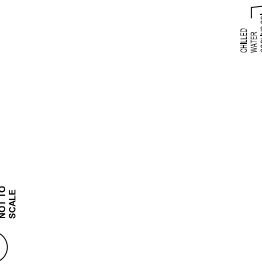
UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

2 CONCRETE EQUIPMENT BASES

3 VIBRATION ISOLATION BASES



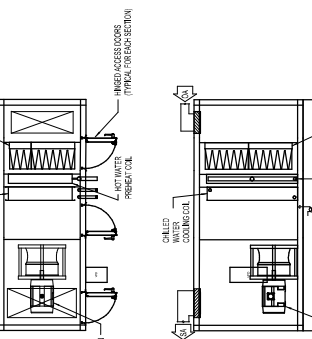
NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN



NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

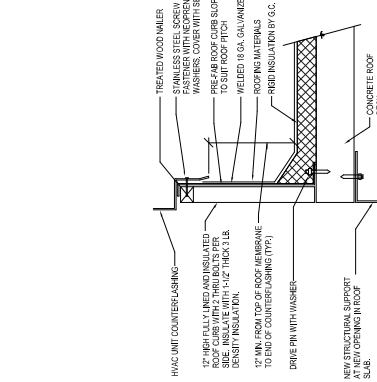
DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

1 ROOF CURB DETAILS (TYPICAL)

2 CONCRETE EQUIPMENT BASES

3 VIBRATION ISOLATION BASES



NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

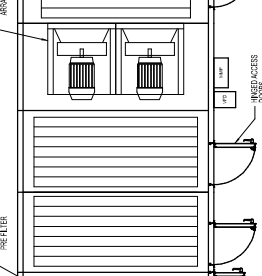
UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

1 ROOF CURB DETAILS (TYPICAL)

2 CONCRETE EQUIPMENT BASES



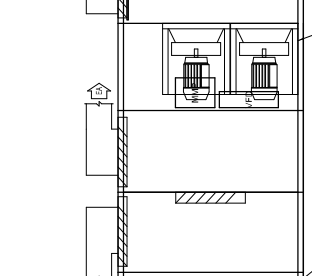
NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN



NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

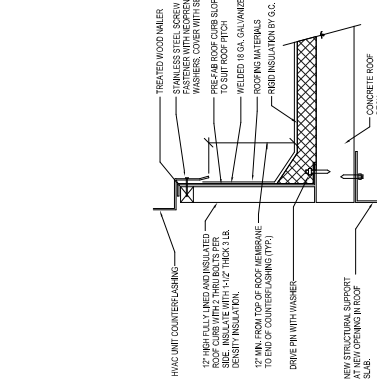
DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

1 ROOF CURB DETAILS (TYPICAL)

2 CONCRETE EQUIPMENT BASES

3 VIBRATION ISOLATION BASES



NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

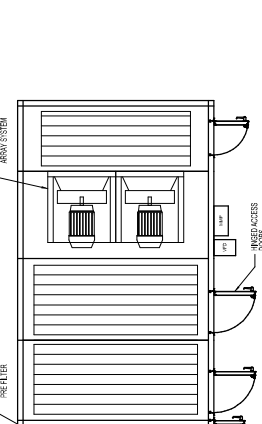
UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

1 ROOF CURB DETAILS (TYPICAL)

2 CONCRETE EQUIPMENT BASES



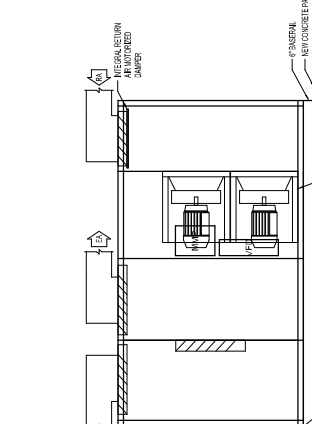
NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN



NOTE: DISSEMBLABLE FITTINGS TO BE USED WHEN TWO TRAP OR INVERTAL PANE IS BELOW TRAP PRONGE

DISSEMBLABLE METALS ARE TO BE CONNECTED

UNIT TYPE

DRAM THRU	A	B	C
1" (25mm)	1"	1"	2"
MINIMUM			

WHERE X = STATIC PRESSURE IN PAN

1 ROOF CURB DETAILS (TYPICAL)

2 CONCRETE EQUIPMENT BASES

3 VIBRATION ISOLATION BASES

MAKE UP AIR UNIT SCHEDULE

[illegible]

AIR HANDLING UNIT SCHEDULE

[illegible]

DIFFUSER, GRILLE, AND REGISTER SCHEDULE

EQUIPMENT TAG	MANUFACTURER	MODEL	TYPE	NOMINAL FACE SIZE	MATERIAL	MAX W.C.	NOTES
A	TITUS	OMH	SQUARE PANEL FLUSH	24"x24"	STEEL	30	1,2,3,4
B	HALTON	KCD	KITCHEN DIFFUSER	48"x24"	STAINLESS STEEL	30	1,2,3,4
C	TITUS	PAR	PERFORATED FLUSH FACE	24"x24"	STEEL	30	1,2,3,4
D	TITUS	PAR	PERFORATED FLUSH FACE	24"x24"	ALUMINUM	30	1,2,3,4
E	HALTON	KCD	KITCHEN DIFFUSER	24"x24"	STAINLESS STEEL	30	1,2,3,4
F	TITUS	3002R	LOWERED RETURN	48"x48"	STEEL	35	1,2,3,4

EXHAUST FAN SCHEDULE

EQUIPMENT TAG	MANUFACTURER	BASES OF DESIGN	LOCATION	AREA SERVED	TYPE	DRIVE	WEIGHT (LBS)	CFM (AV)	WASHING SQUARES	DOWN PUMP	BYP	MP	RPM	PHASE	POLY	CONTROL SYSTEM	NOTES		
EF-4		GREENIECK	CLUB MECHANICAL ROOM	MENSIN, TAIL AND GENERAL DRAIN	INLINE	BELT	80	1,000	1.5	16.9	1.762	0.48	34	1778	3	460	BAS	12.4.5	
EF-50		GREENIECK	CLUB-HHRA	ROOF	CENTRIFUGAL WASH	DIRECT	81	750	1.5	15.3	1.725	0.41	34	1725	3	460	BAS	12.3.4.5.7	
EF-51		GREENIECK	CLUB-H1A	ROOF	CART WASH	DIRECT	83	2,000	1.5	13.7	1.725	0.59	1	1725	3	460	BAS	12.3.4.5.6	
EF-C009		GREENIECK	CLUBS LOADING DOCK	CONCRETE ON CONCRETE	UPPER AXIAL	DIRECT	317	25,000	0.25	-	1.701	6.52	7	102	1725	3	460	T-S/TAT	12.5.8.9
EF-500W		GREENIECK	WAREHOUSE CEILING	TEMPORARY STAFF OFFICE	INLINE CABINET	DIRECT	123	2,100	0.998	3.5	1.100	FLA 425	889 W	1109	1	115	BAS	12.5.9	

3. PROV

4. PROVIDE ALUMINUM BRIDGEPIN.
5. FAN SHALL COME IN STANDARD EMAME GREY COLOR.
6. FAN SHALL OPERATE WHILE CART WASH IS IN OPERATION.
7. FAN SHALL OPERATE WHILE DISHWASHER IS IN OPERATION.
8. FAN SHALL OPERATE TO MAINTAIN MAXIMUM TEMPERATURE OF 85°F.
9. FAN SHALL COME WITH FACTORY SPECIFIED VFD.

NOTES:

1. OTHER ACCEPTABLE MANUFACTURERS: VA APPROVED EQUAL.
2. FINISH AS SELECTED BY ARCHITECT.
3. PROVIDE DAMPER AT NECK.
4. 1/2"x1/2"x1" GRID.

[illegible]

FAN COIL UNIT SCHEDULE																											
GENERAL					HEATING/COOLING COIL																						
EQUIPMENT TAG	LOCATION	AREA SERVED	MANUFACTURER	MODEL	STANDARD AIR FLOW (CFM)	CABINET				COOLING COIL				HEATING COIL				ELCTD TYPE	FAN (RPM)	PHASE	NOTES						
						TYPE	N	D	W	TYPE	W	D	W	TYPE	W	D	W										
FQ400719R	GD-129	GD-129	TTTUS	TRBP-30	250	35	DUCTED, CONCEALED	32	40	10	1.2	3.2	45	7593	8	0.5	1	0.77	180	70	116.3	11.2	MERV 8	1	277	1,2,3,4,5,6	
FQ400108R	GD-100R	GD-100R	TTTUS	TRBP-40	300	110	DUCTED, CONCEALED	32	50	10	2.2	4	15	45	7593	10.5	0.5	1	0.94	180	70	107.9	14.6	MERV 8	1	277	1,2,3,4,5,6
FQ400109P	GD-100P	GD-100P	TTTUS	TRBP-40	335	65	DUCTED, CONCEALED	32	50	10	4	1.3	45	7593	9.7	0.5	1	0.94	180	70	110.1	14.2	MERV 8	1	277	1,2,3,4,5,6	
FQ400107Y	GD-107Y	GD-107Y	TTTUS	TRBP-50	600	300	DUCTED, CONCEALED	32	60	10	3.5	4	2.2	45	7593	16.6	0.5	1	1.13	180	70	97	18.5	MERV 8	1	277	1,2,3,4,5,6
FQ400107L	GD-107L	GD-107L	TTTUS	TRBP-50	640	75	DUCTED, CONCEALED	32	60	10	2.0	4	1.3	45	7593	9.7	0.5	1	0.94	180	70	109.7	14.7	MERV 8	1	277	1,2,3,4,5,6
FQ400107W	GD-107W	GD-107W	TTTUS	TRBP-40	360	165	DUCTED, CONCEALED	32	50	10	2.2	4	1.5	45	7593	10.5	0.5	1	0.94	180	70	107.9	14.6	MERV 8	1	277	1,2,3,4,5,6
FQ400109N	GD-109N	GD-109N	TTTUS	TRBP-50	570	230	DUCTED, CONCEALED	32	60	10	3.0	4	1.8	45	7593	14.7	0.5	1	1.12	180	70	96.7	17.9	MERV 8	1	277	1,2,3,4,5,6
FQ400101L	GD-101L	GD-101L	TTTUS	TRBP-50	635	200	DUCTED, CONCEALED	32	60	10	3.3	4	2.0	45	7593	16.2	0.5	1	1.13	180	70	97.4	18.4	MERV 8	1	277	1,2,3,4,5,6
NOTES:																											
1. OTHER ACCEPTABLE MANUFACTURERS, IN APOPROPRIATE EQUIPMENT.																											
2. PROVIDE FACTORY INSTALLED VALVE PACKAGE INDICATED ON FAN COIL UNIT PERIAPING DETAIL.																											
3. ELECTRONIC CONTROL WITH WALL MOUNTED PROGRAMMABLE 15 STAT.																											
4. COORDINATE LEFT OR RIGHT HAND COIL CONNECTIONS WITH INSTALLATION AND EXISTING CONDITIONS.																											
5. PROVIDE WITH NONPILLOW RUBBER VIBRATION ISOLATORS IN EACH HANGER BOUL.																											
6. FACTORY INSTALLED DISCONNECT.																											

CONDENSATE PUMP SCHEDULE														
EQUIPMENT TAG	LOCATION	SYSTEM/SAFE	RECEIVER TANK (GALLONS)	CONDENSATE TEMPERATURE (°F)	CIRCULATING FLUID			ELECTRICAL				MANUFACTURER	MODEL	REMARKS
					FLOW (GPM)	HEAD (PSI)	QTY	POWER (HP)	RPM	VOLTS	PHASE			
01A-JU1	GC-105 MECHANICAL ROOM	STEAM RETURN	21 x 13	274	9	20	1	1/3	3500	115	1	BELL AND GOSSETT	ZC2CB-240	1,2,3,4
01A-JU1	GC-105 MECHANICAL ROOM	STEAM RETURN	21 x 13	274	9	20	1	1/3	3500	115	1	BELL AND GOSSETT	ZC2CB-240	1,2,3,4

NOTES:
1. OTHER ACCEPTABLE MANUFACTURERS: VIA APPROVED EQUAL.
2. PROVIDE BASKET STRAINER, HIGH ALARM/SHUTTER, POWER SWITCHING RELAY, STARTER WITH AUTO/OFF/HAND SWITCH, ELECTRONIC ALTERNATOR, BUTTERFLY ISOLATION VALVES, PUMP PILOT, AND DISCHARGE PRESSURE GAUGE.
3. PROVIDE NON-FUSED DISCONNECT, 1/4" LISTED CONTROL PANEL, AND FUSE MOTORS.
4. REFER TO SPECIFICATION SECTION 23.22.22 STEAM CONDENSATE PUMPS.

SUSPENDED UNIT HEATER SCHEDULE														
EQUIPMENT TAG	LOCATION	MANUFACTURER	MODEL	TYPE	FAN			HEATING COIL			MOTOR			
					TYPE	CFM (FAN/AMP)	WATT (FAN/AMP)	WATT (FAN/AMP)	WATT (FAN/AMP)	WATT (FAN/AMP)	HP	VOLT PHASE		
SH-001	G1313 FUTURE SPACE	REZNOR	WS 4402	HOT WATER SUSPENDED UNIT HEATER	PROPELLER	900	1000	62	4.54	0.15	100	60	0.002	115 1 1, 2
SH-002	G1313 FUTURE SPACE	REZNOR	WS 4402	HOT WATER SUSPENDED UNIT HEATER	PROPELLER	900	1000	62	4.54	0.15	100	60	0.002	115 1 1, 2
SH-003	G1313 FUTURE SPACE	REZNOR	WS 4402	HOT WATER SUSPENDED UNIT HEATER	PROPELLER	900	1000	62	4.54	0.15	100	60	0.002	115 1 1, 2
SH-004	G1313 FUTURE SPACE	REZNOR	WS 4402	HOT WATER SUSPENDED UNIT HEATER	PROPELLER	900	1000	62	4.54	0.15	100	60	0.002	115 1 1, 2
SH-005	G1313 FUTURE SPACE	REZNOR	WS 4402	HOT WATER SUSPENDED UNIT HEATER	PROPELLER	900	1000	62	4.54	0.15	100	60	0.002	115 1 1, 2
SH-006	G1313 FUTURE SPACE	REZNOR	WS 4402	HOT WATER SUSPENDED UNIT HEATER	PROPELLER	900	1000	62	4.54	0.15	100	60	0.002	115 1 1, 2

NOTES:

1. OTHER ACCEPTABLE MANUFACTURERS: VA-APPROVED EQUAL.

2. HORIZONTAL AND VERTICAL DEFLECTION ALLOWED.

SINGLE STAGE STEAM PRESSURE REGULATOR VALVE SCHEDULE								
EQUIPMENT TAG	LOCATION	1ST STAGE					NOTES	
		MANUFACTURER	SERIES	INLET PRESSURE (PSI)	OUTLET PRESSURE (PSI)	VALVE SIZE (IN)		COORDINATE (EAST/NORTH)
PPW-S0006	GC-105 504T WEST MECHANICAL ROOM	ITT INDUSTRIES	KITCHEN EQUIPMENT	110	20	1-1/2	2, 100	1, 2
NOTES:								
1. OTHER ACCEPTABLE MANUFACTURERS, WA APPROVED EQUAL.								
2. PROVIDE PRESSURE IN/OUT ACOUSTIC ORIFICE PLATE AND HARDWARE KIT.								

PUMP SCHEDULE															
EQUIPMENT TAG	LOCATION	SERVICE	MANUFACTURER	MODEL	TYPE	GPM	HEAD (FT)	MFD	MOTOR			NOTES			
									HP	PHASE	VOLT				
P-15	GC-10 MECHANICAL ROOM	CHILLED WATER LOOP	BELL & GOSSETT	e-510 BE	CENTRIFUGAL BASE MOUNTED	1400	70.0	11.2	10	1668	75.8%	40	3	460	12.3
P-16	GC-10 MECHANICAL ROOM	CHILLED WATER LOOP	BELL & GOSSETT	e-510 BE	CENTRIFUGAL BASE MOUNTED	1400	70.0	11.2	10	1668	75.8%	40	3	460	12.3
P-1	GC-10 MECHANICAL ROOM	CHILLED WATER LOOP	BELL & GOSSETT	e-510 BE	CENTRIFUGAL BASE MOUNTED	400	70.0	5.5	10	1461	74.9%	15	3	277	12.3
P-2	GC-10 MECHANICAL ROOM	CHILLED WATER LOOP	BELL & GOSSETT	e-510 BE	CENTRIFUGAL BASE MOUNTED	400	70.0	5.5	10	1461	74.9%	15	3	277	12.3

NOTES:
1. OTHER ACCEPTABLE MANUFACTURERS: VA APPROVED EQUAL.
2. REMOTE VFD TO BE PROVIDED.
3. PROVIDE PREMIUM EFFICIENCY MOTORS WITH SHAFT GROUNDING RING, VIBRATION ISOLATION, AND NON-USED DISCONNECT.

WALL LOWER SCHEDULE												
EQUIPMENT TAG	LOCATION	SERVICE	MANUFACTURER	MODEL	TYPE	SIZE (IN.)		CFM	FREE AREA VELOCITY (FPM)	F.D. (IN. W.G.)	WATER PENETRATION VELOCITY (FPM)	NOTES
						W	D					
441	LOADING DOCK	EF-CUB	WERNER-QUINCY	ALU-H204	ACOUSTIC COVER AIRSIDE SLIDE	132	46	24	25000		N/A	1,2,3,4
NOTES:												
1. OTHER ACCEPTABLE MANUFACTURERS, VA APPROVED EQUAL.												
2. PROVIDE ALUMINUM BINS/SOREN.												
3. COLOUR AND FINISH TO BE SELECTED BY ARCHITECT.												
4. WATER PENETRATION VELOCITY BASED ON 1/2" CORNERING FT. WITH A 40-45" COVER AND A TEST PERIOD OF 15 MIN.												

TWO STAGE STEAM PRESSURE REGULATOR VALVE SCHEDULE												
EQUIPMENT TAG	LOCATION	MANUFACTURER	SERIES	1ST STAGE (PNV-12A)			2ND STAGE (PNV-12B)			NOTES		
				VALVE PRESSURE (PSI)	CAPACITY (USGPM)	VALVE SIZE (IN)	VALVE PRESSURE (PSI)	CAPACITY (USGPM)	VALVE SIZE (IN)			
PNV-12	GC-HR (BENT WEST VALVE)	ITT INDUSTRIES	STEAM LOOP	110	35	4158	1-1/2	110	35	2742	1-1/4	1
NOTES:												
1. OTHER ACCEPTABLE MANUFACTURERS: UNAPPROVED EQUAL.												

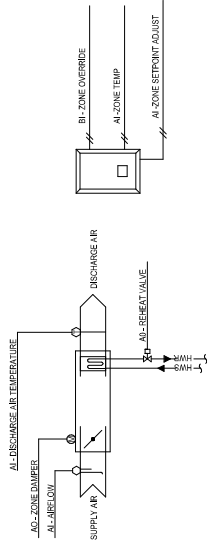
[illegible]

VAV BOX WITH HOT WATER REHEAT SCHEDULE																					
EQUIPMENT TAGS	LOCATION	MANUFACTURER	AIRFLOW (CFM)			APPROX. DIMENSIONS (IN)				HOT WATER COIL				MOISTURE LEVEL (MD)				INTERNAL SOUND ATTENUATOR	NOTES		
			MODEL	MIN.	MAX.	INLET SIZE	OUTLET SIZE	H	L	W	HEATING CFM	CAPACITY (MBH)	EAT (°F)	LAT (°F)	ERT (°F)	GPM	ROWS			RADIATED	DISCHARGE
VAV-G001A	G04-011	TTUS	DES9	1860	3010	16	26x18	16.0	15.5	24.0	3010	61.6	55	80	180	3.3	2	22	23	NO	1,2,3,4,5,6,7,8
VAV-G001B	G04-011	TTUS	DES9	1,245	2,260	14	20x17.5	17.5	15.5	20.0	2280	61.3	55	80	190	2.1	2	23	22	NO	1,2,3,4,5,6,7,8
VAV-G001C	G04-011	TTUS	DES9	1,715	3,115	16	26x18	16.0	15.5	24.0	3115	84.5	55	80	190	3.5	2	22	24	NO	1,2,3,4,5,6,7,8
VAV-G001H	G04-014	TTUS	DES9	180	265	6	12x6	8.0	15.5	12.0	265	7.7	55	80	180	0.7	1	18	25	NO	1,2,3,4,5,6,7,8
VAV-G001I	G04-012	TTUS	DES9	270	445	8	12x10	10.0	15.5	12.0	445	13.2	55	80	180	1.9	1	19	25	NO	1,2,3,4,5,6,7,8
VAV-G001P	G04-019	TTUS	DES9	155	275	6	12x6	8.0	15.5	12.0	275	7.5	55	80	180	0.6	1	18	25	NO	1,2,3,4,5,6,7,8
VAV-G001D	G04-011	TTUS	DES9	1,715	3,115	16	26x18	16.0	15.5	24.0	3115	84.5	55	80	190	3.5	2	22	23	NO	1,2,3,4,5,6,7,8
VAV-G001E	G04-011	TTUS	DES9	605	1,100	10	14x12.5	12.5	15.5	14.0	1100	26.8	55	80	180	1.3	2	23	27	NO	1,2,3,4,5,6,7,8
VAV-G000B	G04-030	TTUS	DES9	800	1,455	14	20x17.5	17.5	15.5	20.0	1455	34.7	55	77	180	1.3	2	20	19	NO	1,2,3,4,5,6,7,8
VAV-G0005	G04-005	TTUS	DES9	340	615	8	12x10	10.0	15.5	12.0	615	16.7	55	80	180	0.7	2	20	25	NO	1,2,3,4,5,6,7,8
VAV-G0002	G04-002	TTUS	DES9	135	240	6	12x6	8.0	15.5	12.0	240	6.5	55	80	180	0.5	1	16	23	NO	1,2,3,4,5,6,7,8
VAV-G0003	G04-003	TTUS	DES9	155	275	6	12x6	8.0	15.5	12.0	275	7.5	55	80	180	0.6	1	18	24	NO	1,2,3,4,5,6,7,8
VAV-G0010	G04-010	TTUS	DES9	105	190	6	12x6	8.0	15.5	12.0	190	5.2	55	80	180	0.3	1	13	20	NO	1,2,3,4,5,6,7,8
VAV-G0008	G04-008	TTUS	DES9	150	270	6	12x6	8.0	15.5	12.0	270	7.3	55	80	180	0.6	1	17	25	NO	1,2,3,4,5,6,7,8
VAV-G0005	G04-005	TTUS	DES9	180	305	8	12x10	10.0	15.5	12.0	305	8.8	55	80	180	0.5	1	15	23	NO	1,2,3,4,5,6,7,8
VAV-G0012A	G04-012A	TTUS	DES9	445	860	10	14x12.5	12.5	15.5	14.0	860	21.0	55	85	180	1	2	22	25	NO	1,2,3,4,5,6,7,8
VAV-G0013H	G04-013H	TTUS	DES9	430	240	10	14x12.5	12.5	15.5	14.0	240	10.2	55	95	190	1.2	1	20	22	NO	1,2,3,4,5,6,7,8
VAVH1	G04-011	HALTON		1,100	2,000	12	16x15	15.0	15.5	16.0	2000	N/A	N/A	N/A	N/A	N/A	N/A	29	31	NO	1,2,3,4,5,6,7,8
VAVH2	G04-011	HALTON		1,100	2,000	12	16x15	15.0	15.5	16.0	2000	N/A	N/A	N/A	N/A	N/A	N/A	29	31	NO	1,2,3,4,5,6,7,8
VAVH3	G04-011	HALTON		1,375	2,560	14	20x17.5	17.5	15.5	20.0	2500	N/A	N/A	N/A	N/A	N/A	N/A	27	24	NO	1,2,3,4,5,6,7,8
VAVH4	G04-011	HALTON		1,650	3,000	14	20x17.5	17.5	15.5	20.0	3000	N/A	N/A	N/A	N/A	N/A	N/A	29	25	NO	1,2,3,4,5,6,7,8
VAVH5	G04-011	HALTON		1,375	2,560	14	20x17.5	17.5	15.5	20.0	2500	N/A	N/A	N/A	N/A	N/A	N/A	27	24	NO	1,2,3,4,5,6,7,8
VAV-G0004	G04-004	TTUS	DES9	100	50	4	12x6	8.0	15.5	12.0	50	4.7	55	80	N/A	0.5	1	14	27	NO	1,2,3,4,5,6,7,8
VAV-G0014	G06-034	TTUS	DES9	200	200	6	12x6	8.0	15.5	12.0	200	5.0	55	92	180	0.5	0	14	22	NO	1,2,3,4,5,6,7,8
VAV-G0006	G04-006	TTUS	DES9	200	200	6	12x6	8.0	15.5	12.0	200	5.0	55	92	180	0.5	0	14	22	NO	1,2,3,4,5,6,7,8

NOTES:

1. OTHER ACCEPTABLE MANUFACTURERS, VIA APPROVED EQUAL.
2. BOX SHALL BE LINED WITH 1" FIBER-FREE INSULATION.
3. SOUND LEVELS (NO AIR FLOW) WITH 0.17" INLET STATIC PRESSURE AND 0.5" DISCHARGE PRESSURE. NOISE OPTION (NO SOUND INFORMATION) BASED ON 140dB(A).
4. REGARDS OF HOT WATER COIL AIR PRESSURE DROP, AVAILABLE DISCHARGE STATIC PRESSURE SHALL NOT BE LESS THAN 1.2' AT AIR FLOW RATE SPECIFIED.
5. HOT WATER COIL WATER PRESSURE DROP SHALL NOT EXCEED 6" AND AIR PRESSURE DROP SHALL NOT EXCEED 0.3 WVG.
6. PROVIDE WITH ACCESS DOORS FOR REHEAT COIL AND FACTORY MOUNTED DISCONNECT.
7. COORDINATE OFF HANGING/DRIFT HANGED COIL CONNECTIONS WITH DESIGN DRAWINGS AND EXISTING FIELD CONDITIONS.
8. PROVIDE NECESSARY 120V / 24V POWER SUPPLY FOR CONTROLLER. POWER, COORDINATE WITH ELECTRICAL DRAWINGS FOR QUANTITY AND LOCATION.

[illegible]



NOTE:
1. PROVIDE CONTROL TRANSFORMER SERVING LOCAL GROUPS OF AIR TERMINAL UNITS (5 VAV BOXES MAX PER TRANSFORMER.)

VARIABLE TERMINAL AIR BOX

SEQUENCE OF OPERATION

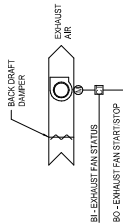
VARIABLE TERMINAL AIR BOX

1. GENERAL
 - a. THE VARIABLE TERMINAL AIRBOX SHALL ACCORDING TO GET TO THE SCHEDULE IN THE FOLLOWING SIZES
2. SCHEDULED SHALL BE BASED ON THE FOLLOWING TENTATIVE a. ADJUSTABLE SCHEDULE.
 - a. OCCUPIED WEEKDAY - FRI DAY
6:00AM - 1:00PM (A/D)
6:00AM - 7:00PM (A/D)
7:00PM - 8:00AM (A/D)
 - b. UNOCCUPIED WEEKDAY - FRI DAY
1:00PM - 6:00PM (A/D)
8:00PM - 7:00PM (A/D)
 - c. SATURDAY - SUNDAY
7:00PM - 8:00AM (A/D)
3. TEMPERATURE CONTROL
 - a. OCCUPIED MODE THE UNIT SHALL MAINTAIN
 - a. 17.2° F (A/D) HEATING SETPOINT
 - b. 18.5° F (A/D) HEATING SETPOINT
 - c. 18.5° F (A/D) HEATING SETPOINT
 - b. UNOCCUPIED MODE (NIGHT SETBACK) THE UNIT SHALL MAINTAIN
 - a. 16.5° F (A/D) HEATING SETPOINT
 - b. 16.5° F (A/D) HEATING SETPOINT
 - c. 16.5° F (A/D) HEATING SETPOINT
4. THE UNIT SHALL MAINTAIN ZONE SETPOINTS BY
 - a. WHEN THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT, THE ZONE DAMPER SHALL MODULATE TO MAINTAIN THE ZONE TEMPERATURE WITHIN THE RANGE OF THE FOLLOWING:
 - a. UNOCCUPIED:
 - 1. WHEN THE ZONE IS UNOCCUPIED THE ZONE DAMPER SHALL CONTROL TO IT'S MINIMUM UNOCCUPIED AIRFLOW (A/D) TO MAINTAIN THE ZONE TEMPERATURE WITHIN THE COOLING SETPOINT, THE ZONE DAMPER SHALL MAINTAIN THE MINIMUM COOLING AIRFLOW (A/D) UNTIL THE MAXIMUM COOLING AIRFLOW (A/D) UNTIL THE ZONE IS SATISFIED.
 - 2. THERE IS LESS THAN 1% UNOCCUPIED HEATING SETPOINT, THE CONTROLLER SHALL ENABLE HEATING TO MAINTAIN THE ZONE TEMPERATURE WITHIN THE UNOCCUPIED HEATING SETPOINT UNTIL THE MINIMUM COOLING AIRFLOW (A/D) AND THE HEATING AIRFLOW (A/D) UNTIL THE ZONE IS SATISFIED.
 - b. OCCUPIED:
 - 1. THE UNIT SHALL USE AN OPTIMAL START ALGORITHM FOR MORNING STARTUP. THIS ALGORITHM SHALL MINIMIZE THE TIME TO REACH THE COOLING SETPOINT AND THE CONTROL OF THE SCHEDULING COMFORT CONDITIONS BY THE START OF STILL ACHIEVING COMFORT CONDITIONS.
 - b. UNOCCUPIED OVERRIDE
 - 1. A TIMELOG OVERRIDE CONTROL SHALL ALLOW AN UNOCCUPIED ZONE TO BE OCCUPIED FOR A PERIOD OF TIME INTO OPERATION MODE FOR AN ADJUSTABLE PERIOD OF TIME TO REACH THE COOLING SETPOINT AND THE CONTROL OF THE SCHEDULING COMFORT CONDITIONS BY THE START OF STILL ACHIEVING COMFORT CONDITIONS.

VARIABLE TERMINAL AIR BOX POINTS LIST

	HARDWARE POINTS				SOFTWARE POINTS					
	A1	A0	B1	B0	AV	BV	SCHED	TEND	ALARM	SHOW ON GRAPHIC
POINT NAME	X									
DISCHARGE AIR TEMPERATURE	X								X	
ZONE SETPOINT ADJUST	X									X
ZONE STOP DOWN	X								X	
ZONE LOW	X								X	
ZONE TEMPERATURE	X								X	
HOT WATER HEATING VALVE	X								X	
COOLING COIL DAMPER	X								X	
JARLOW SETPOINT	X				X				X	
COOLING-HEATING SETPOINT	X				X				X	X
DISCHARGE AIR TEMPERATURE HEATING LIMIT	X				X				X	
HEATING COOLING HOPE					X				X	
SCHEDULE OCCUPANCY							X			
HIGH DISCHARGE AIR TEMPERATURE									X	
HIGH ZONE TEMPERATURE									X	
LOW DISCHARGE AIR TEMPERATURE									X	
LOW ZONE TEMPERATURE									X	X

EXHAUST FAN POINTS LIST (EF-1, EF-50, EF-51)

[illegible]

EXHAUST AIR CONTROL DIAGRAM (EF-1)

RUN CONDITIONS - CONTINUOUS:
THE FAN SHALL RUN CONTINUOUSLY

FAN:
THE FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.
EXHAUST AIR DAMPER:
THE EXHAUST AIR DAMPER SHALL OPEN ANYTIME THE UNIT RUNS AND SHALL CLOSE ANYTIME THE UNIT STOPS. THE EXHAUST AIR DAMPER SHALL CLOSE SEC (ADJ.) AFTER THE FAN STOPS.

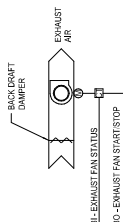
ALARMS SHALL BE PROVIDED AS FOLLOWS:

- DAMPER FAILURE: COMMAND OPEN, BUT THE STATUS IS CLOSED.
- DAMPER IN HAND: COMMAND CLOSED, BUT THE STATUS IS OPEN.

FAN STATUS:

FAN STATUS:
THE CONTROLLER SHALL MONITOR THE FAN STATUS

- FAN FAILURE: COMMAND ON, BUT THE STATUS IS OFF.
- FAN IN HAND: COMMAND OFF, BUT THE STATUS IS ON.
- FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADU).



EXHAUST AIR CONTROL DIAGRAM (EF-50)

RUN CONDITIONS - CONTINUOUS:
THE FAN SHALL BE ACTIVATED BY DISHWASHER

FAN:
THE FAN SHALL HAVE A USER DEFRINABLE (ADJ.) MINIMUM RUNTIME.
EXHAUST AIR DAMPER:
THE EXHAUST AIR DAMPER SHALL OPEN ANYTIME THE DISHWASHER RUNS AND SHALL CLOSE ANYTIME THE UNIT STOPS. THE EXHAUST AIR DAMPER SHALL CLOSE SECONDLY AFTER THE FAN STOPS.

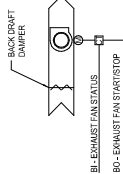
- DAMPER FAILURE: COMMANDED OPEN, BUT THE STATUS IS CLOSED.
- DAMPER IN HAND: COMMANDED CLOSED, BUT THE STATUS IS OPEN.

FAN STATUS:

FAN STATUS:
THE CONTROLLER SHALL MONITOR THE FAN STATUS.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADJ.)



EXHAUST AIR CONTROL DIAGRAM (EF-51)

RUN CONDITIONS - CONTINUOUS:
THE FAN SHALL BE ACTIVATED BY

FAN:
THE FAN SHALL HAVE A USER DEFINABLE (ADJ.) MINIMUM RUNTIME.
EXHAUST AIR DAMPER:
THE EXHAUST AIR DAMPER SHALL OPEN ANYTIME THE CART WASHER AND
SHALL CLOSE ANYTIME THE UNIT STOPS. THE EXHAUST AIR DAMPER SHALL
USE SEC (ADJ.) AFTER THE UNIT STOPS.

- DAMPER FAILURE: COMMANDED OPEN, BUT THE STATUS IS CLOSED.
- DAMPER IN HAND: COMMANDED CLOSED, BUT THE STATUS IS OPEN.

FAN STATUS:

ALARMIS SHALL BE PROVIDED AS FOLLOWS:

- FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- FAN RUNTIME EXCEEDED: FAN STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT (ADU).

CONSULTANT

ARCHITECT/ENGINEER OF RECORD

STAMP

Drawing Title
MECHANICAL CONTROLS

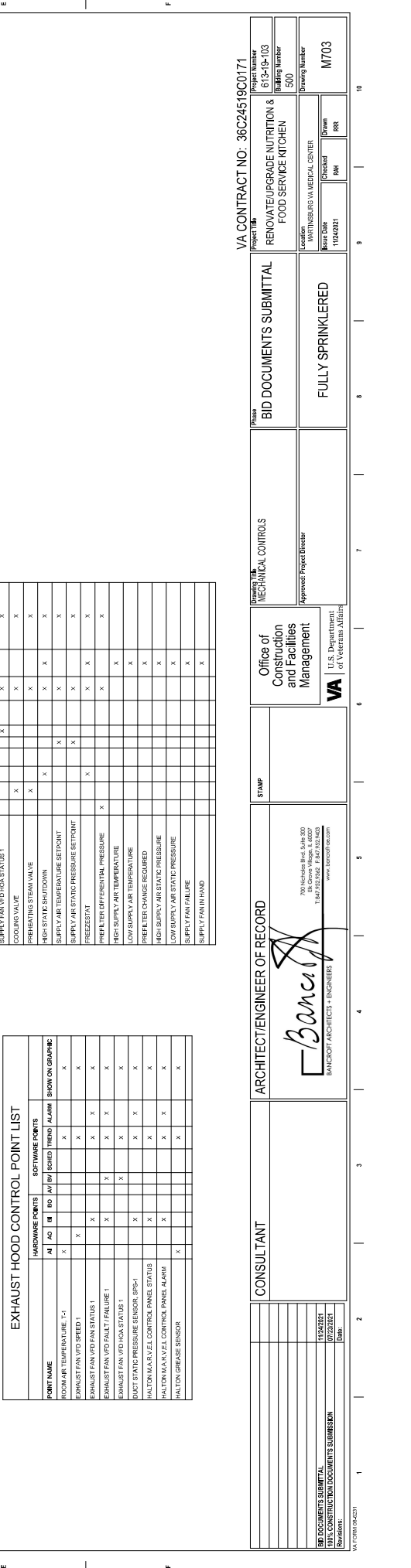
1950 DIPLOMMATO DI IDMITTAI

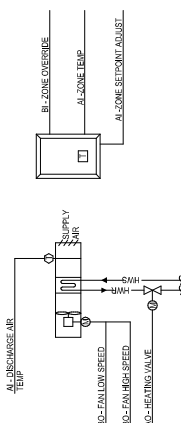
Project Title	Project Number
	613 10 1

Bancroft Architects + Engineers
700 Nicholas Blvd., Suite 300
Bk. Grove Village, IL 60007
T: 847.952.9262 F: 847.952.9403
www.bancroft-ae.com

Construction
and Facilities
Management

location	FOOD SERVICE KITCHEN
Drawn	5





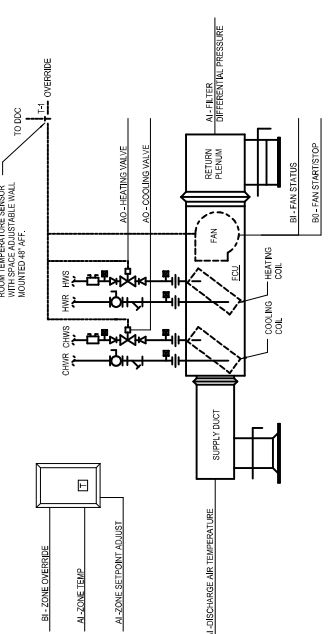
1 UNIT HEATER CONTROL DIAGRAM

- RUN CONDITIONS - SCHEDULED.
 - THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
 - UNOCCUPIED MODE NIGHT SETBACK: THE UNIT SHALL MAINTAIN A HEATING SETPOINT OF 60°F (A.U.).
 - UNOCCUPIED MODE NIGHT SETBACK: THE UNIT SHALL MAINTAIN A HEATING SETPOINT OF 60°F (A.U.).
 - ALWAYS SHALL BE PROVIDED AS FOLLOWS:
 - LOW ZONE TEMP IF THE ZONE TEMPERATURE IS LESS THAN THE HEATING SETPOINT BY A USER DEFINABLE AMOUNT (A.U.).
- ZONE SETPOINT ADJUST:
 - THE ZONE SETPOINT SHALL BE ADJUSTED BY A USER DEFINABLE AMOUNT (A.U.).
- ZONE UNOCCUPIED OVERSPEED:
 - AT TWO LOCAL OVERSPEEDS, THE UNIT SHALL MAINTAIN A HEATING SETPOINT OF 60°F (A.U.).

FAN COIL UNIT POINT LIST

POINT NAME	HARDWARE POINTS				SOFTWARE POINTS				SHOW ON GRAPHIC
	AI	AO	BI	BO	BI	BO	BI	BO	
DISCHARGE AIR TEMPERATURE	X								X
FAN STATUS					X				X
SUPPLY FAN VFD FAULT / FAILURE					X				X
SUPPLY FAN VFD KICK STATUS					X				X
COOLING VALVE					X				X
PREHEATING STREAM VALVE					X				X
HIGH STATIC SHUTDOWN					X				X
SUPPLY AIR STATIC PRESSURE SETPOINT					X				X
FREESTAT					X				X
PREFILTER DIFFERENTIAL PRESSURE					X				X
ZONE OVERSPEED					X				X
SCHEDULE					X				X
HIGH SUPPLY AIR TEMPERATURE					X				X
LOW SUPPLY AIR TEMPERATURE					X				X
PREFILTER CHANGE REQUIRED					X				X
HIGH SUPPLY AIR STATIC PRESSURE					X				X
LOW SUPPLY AIR STATIC PRESSURE					X				X
SUPPLY FAN FAILURE					X				X
SUPPLY FAN IN HAND					X				X

NO



2 FOUR PIPE FAN COIL UNIT CONTROLS

- RUN CONDITIONS - SCHEDULED.
 - THE UNIT SHALL RUN ACCORDING TO A USER DEFINABLE TIME SCHEDULE IN THE FOLLOWING MODES:
 - UNOCCUPIED MODE NIGHT SETBACK: THE UNIT SHALL MAINTAIN A HEATING SETPOINT OF 60°F (A.U.).
 - UNOCCUPIED MODE NIGHT SETBACK: THE UNIT SHALL MAINTAIN A HEATING SETPOINT OF 60°F (A.U.).
 - ALWAYS SHALL BE PROVIDED AS FOLLOWS:
 - LOW ZONE TEMP IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (A.U.).
 - LOW ZONE TEMP IF THE ZONE TEMPERATURE IS GREATER THAN THE COOLING SETPOINT BY A USER DEFINABLE AMOUNT (A.U.).
- GENERAL:
 - THE FAN COIL UNIT FAN WILL BE CONTROLLED TO MAINTAIN AN OCCUPIED HEATING SETPOINT OF 60°F (A.U.). THE COOLING SETPOINTS MAY BE ADJUSTED LOCALLY IN THE SPACE BY THE THERMOSTAT UP OR DOWN WITH A ±3°F OFFSET FROM THE SETPOINT. ALL SETPOINTS WILL BE ADJUSTABLE THROUGH THE BUS.
 - EXCESSIVE USER DEFINABLE LIMIT (A.U.).
 - THE FAN COIL UNIT FAN WILL BE CONTROLLED TO MAINTAIN AN OCCUPIED HEATING SETPOINT OF 60°F (A.U.). THE COOLING SETPOINTS MAY BE ADJUSTED LOCALLY IN THE SPACE BY THE THERMOSTAT UP OR DOWN WITH A ±3°F OFFSET FROM THE SETPOINT. ALL SETPOINTS WILL BE ADJUSTABLE THROUGH THE BUS.
 - EXCESSIVE USER DEFINABLE LIMIT (A.U.).
 - FAN SPEED SHALL BE ADJUSTABLE FROM THE ROOM THERMOSTAT AND SETPOINTS SHALL BE ADJUSTABLE THROUGH THE BUS.
 - EXCESSIVE USER DEFINABLE LIMIT (A.U.).
 - WHEREVER THE FAN IS SHUT DOWN THE FOLLOWING SHALL OCCUR:
 - CHILLED WATER CONTROL VALVE SHALL CLOSE TO PREVENT CHILLED WATER FLOW THROUGH THE COOLING COIL.
 - CHILLED WATER CONTROL VALVE SHALL CLOSE TO PREVENT HOT WATER FLOW THROUGH THE COIL.
 - SUPPLY FAN SHALL BE DE-ENERGIZED.

- COOLING MODE FAN CONTROL:
 - FAN COIL SHALL RUN CONTINUOUSLY IN OCCUPIED MODE.
 - WHEN THE SPACE TEMPERATURE RISES ABOVE THE COOLING SETPOINT, THE FAN SHALL RUN AT HIGH SPEED. WHEN THE SPACE TEMPERATURE FALLS BELOW THE COOLING SETPOINT, THE FAN SHALL BE CYCLED OFF.
 - COOLING CONTROL VALVE V2 SHALL BE OPEN TO MAINTAIN ROOM AIR TEMPERATURE. AS THE ROOM AIR TEMPERATURE CONTINUES TO RISE ABOVE THE COOLING SETPOINT, THE FAN SHALL RUN AT HIGH SPEED. WHEN THE ROOM AIR TEMPERATURE FALLS BELOW THE COOLING SETPOINT, THE FAN SHALL BE CYCLED OFF TO HIGH SPEED. WHENEVER THE TEMPERATURE GOES OUTSIDE THE SETPOINT BY A DEFINABLE AMOUNT, THE COOLING VALVE SHALL MODULATE TO MAINTAIN SPACE TEMPERATURE SETPOINT.

- HEATING MODE FAN CONTROL:
 - FAN COIL SHALL RUN CONTINUOUSLY IN OCCUPIED MODE.
 - WHEN THE SPACE TEMPERATURE FALLS BELOW THE HEATING SETPOINT, THE FAN SHALL RUN AT HIGH SPEED. WHEN THE SPACE TEMPERATURE RISES ABOVE THE HEATING SETPOINT, THE FAN SHALL BE CYCLED OFF.
 - HEATING CONTROL VALVE V1 SHALL BE OPEN TO MAINTAIN ROOM AIR TEMPERATURE. AS THE ROOM AIR TEMPERATURE CONTINUES TO FALL BELOW THE HEATING SETPOINT, THE FAN SHALL RUN AT HIGH SPEED. WHENEVER THE TEMPERATURE GOES OUTSIDE THE SETPOINT BY A DEFINABLE AMOUNT, THE HEATING VALVE SHALL MODULATE TO MAINTAIN SPACE TEMPERATURE SETPOINT.

- SAFETIES:
 - IF THERE IS A CONDENSATE OVERFLOW ALARM, THE SUPPLY FAN WILL BE DISABLED THROUGH A HARDWIRED INTERLOCK WITH THE ASSOCIATED FAN SWITCH. NORMAL OPERATION WILL BE RESTORED WHEN THE ALARM CLEARS.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

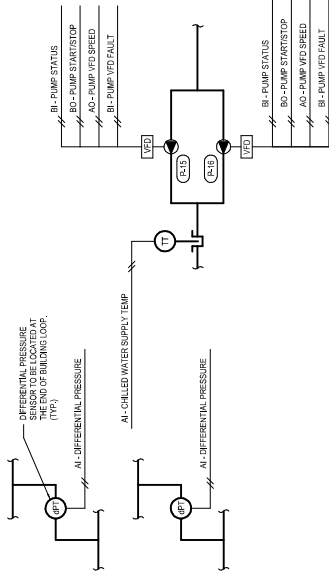
- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

- ALARMS WILL BE INITIATED FOR THE FOLLOWING CONDITIONS:
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - FOLLOW SPACE TEMPERATURE (RPT A.U.).
 - SUPPLY FAN FAILURE.

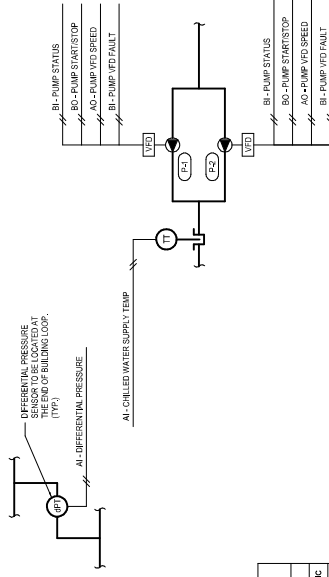
VA CONTRACT NO: 36C24519C0171

Project Title		Project Number	
RENOVATE/UPGRADE NUTRITION & FOOD SERVICE		613-19-103	
Building Number		500	
Location		Drawing Number	
MONTGOMERY VA MEDICAL CENTER		M704	
Contract	Revision	Drawn	Check
11/20/2021	07/20/2021	RAM	RAM
Office of Construction and Facilities Management		U.S. Department of Veterans Affairs	
ARCHITECT/ENGINEER OF RECORD		STAMP	
CONSULTANT		STAMP	
BID DOCUMENTS SUBMITTAL		FULLY SPRINKLERED	
MECHANICAL CONTROLS		FULLY SPRINKLERED	
Approved: Project Director		Approved: Project Director	



CHILLED WATER PUMP IN CHILLER PLANT 1

- [illegible]



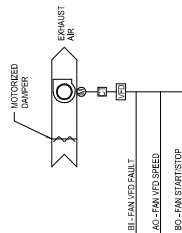
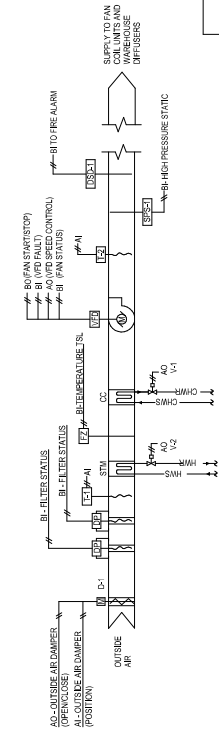
CHILLED WATER PUMP IN CHILLER PLANT 1

1. CHILLED WATER PUMP (EAST/STANDBY OPERATION).
 - a. THE TWO CHILLED WATER PUMPS ARE IDLE/OT (10% CAPACITY ONE PUMP IS ON, THE OTHER IS IDLE/OT).
 - b. THE CHILLED WATER PUMP WILL BE STARTED BY THE CHILLED WATER PUMP STARTER. THE CHILLED WATER PUMP SHALL OPERATE IN LEAST/STANDBY POSITION.
2. CHILLED WATER PUMP (CONTROL).
 - a. THE LEAD PUMP SHALL RUN FIRST.
 - b. ON FAILURE OF THE LEAD PUMP, THE STANDBY PUMP SHALL RUN AND THE LEAD PUMP SHALL COME OFF.
 - c. THE DESIGNATED LEAD PUMP SHALL ROTATE ON A 15 MIN. CIRCULAR TRIP/ON ON THE LEAD PUMP. THE STANDBY PUMP SHALL ROTATE ON A 15 MIN. CIRCULAR TRIP/ON ON THE STANDBY PUMP. THE LEAD PUMP SHALL OPERATE TO MAINTAIN THE CHILLED WATER PUMP LEAD/ON WHILE THE LEAD PUMP IS RUNNING IN HAND/OT COMMAND/OT BUT THE STATUS IS OFF AND PUMP IS RUNNING IN HAND/OT COMMAND/OT BUT THE STATUS IS ON.
3. CHILLED WATER PUMP (MONITORING).
 - a. THE MANAGEMENT SYSTEM SHALL MONITOR/ALERT THE PUMP/PIAS REQUIRED TO BE RUN. THE PUMP/PIAS SHALL BE RUN/ALERTED TO MEET THE REQUIREMENTS OF THE ACTUAL FIELD CONDITIONS.
 - b. THE VFD MINIMUM SPEED SHALL NOT DROP BELOW 30% (VAD).
 - c. THE CHILLED WATER TEMPERATURE MONITORING.
 - d. THE FOLLOWING TEMPERATURES SHALL BE MONITORED:
 - CHILLED WATER SUPPLY.
 - CHILLED WATER RETURN.
- ALARMS SHALL BE PROVIDED AS FOLLOWS:
 - HIGH/CHILLED WATER SUPPLY TEMP IF THE CHILLED WATER SUPPLY TEMPERATURE IS GREATER THAN 5.5 (F/3.1).
 - HIGH/CHILLED WATER RETURN TEMP IF THE CHILLED WATER RETURN TEMPERATURE IS LESS THAN 4.5 (F/2.5).

[illegible]

CHILLED WATER PUMPS UNIT POINT LIST (P-15 & P-16)										
POINT NAME	MEASUREMENTS				SOFTWARE POINTS				SHOW ON GRAPHIC	
	AI	AO	BI	BO	AI (W)	BO (C)	TI (C)	AL (C)		
Chilled Water Return Temp							X		X	
Chilled Water Supply Temp							X		X	
DIFFERENTIAL PRESSURE SENSOR #P1	X						X			
DIFFERENTIAL PRESSURE SENSOR #P2	X						X			
Chilled Water Pump 1 Status		X					X		X	
Chilled Water Pump 2 Status		X					X		X	
Chilled Water Pump 1 Start/Stop				X			X		X	
Chilled Water Pump 2 Start/Stop				X			X		X	
Chilled Water Pump 1 Failure							X		X	
Chilled Water Pump 1 Running in Hand							X		X	
Chilled Water Pump 1 Running Exceeded							X		X	
Chilled Water Pump 2 Failure							X		X	
Chilled Water Pump 2 Running in Hand							X		X	
Chilled Water Pump 2 Running Exceeded							X		X	
Low Chilled Water Supply Temp							X		X	
High Chilled Water Supply Temp							X		X	

[illegible]



1 AIR HANDLING UNIT (AHU-2)

- [illegible]

AIR HANDLING UNIT POINT LIST

POINT NAME	HARDWARE POINTS				SOFTWARE POINTS				SHOW ON GRAPHIC
	AI	AO	BI	BO	SW	SE	TREND	NALIN	
SUPPLY AIR TEMPERATURE T-2	X								X
OUTSIDE AIR TEMPERATURE T-1	X								X
SUPPLY FAN VFD SPEED 1		X							X
SUPPLY FAN VFD FAN STATUS 1		X						X	X
SUPPLY FAN VFD FAULT 1 / FAILURE 1		X				X			X
SUPPLY FAN VFD RUN STATUS 1						X			X
COOLING VALVE (V-1)		X					X		X
PREHEATING STEAM VALVE (V-2)		X					X		X
HIGH STATIC SHUTDOWN							X		X
SUPPLY AIR TEMPERATURE SETPOINT			X				X		X
SUPPLY AIR STATIC PRESSURE SETPOINT			X				X		X
FREEZER STAT				X			X		X
PREFILTER DIFFERENTIAL PRESSURE				X			X		X
HIGH SUPPLY AIR TEMPERATURE								X	
LOW SUPPLY AIR TEMPERATURE								X	
PREFILTER CHANGE REQUIRED								X	
HIGH SUPPLY AIR STATIC PRESSURE								X	
LOW SUPPLY AIR STATIC PRESSURE								X	
SUPPLY FAN FAULT								X	
SUPPLY FAN IN HAND								X	

EXHAUST AIR CONTROL DIAGRAM (EE-500W)

```

RUN CONDITIONS - CONTINUOUS
STATUS - CONTINUOUS
STATUS - LOCKED TO RUN WHENEVER A USER RUNS
UNLESS SHUTDOWN ON SAFETIES.

FAN
THE FAN SHALL HAVE A USER DEFINABLE (X)X(1) MINIMUM RUNTIME.
EXHAUST AIR DAMPER
THE EXHAUST AIR DAMPER SHALL OPERATING THE LIMITS RUNS AND SHALL
CLOSE ANYTIME THE LIMIT STATUS IS OPEN. THE EXHAUST AIR DAMPER SHALL CLOSE
30 SECS (X)X(1) AFTER THE FAN STOP.
ALARMS SHALL BE PROVIDED AS FOLLOWS


- DAMPER FAILURE COMMAND OPEN, BUT THE STATUS IS CLOSED.
- DAMPER HANDLE COMMAND CLOSED, BUT THE STATUS IS OPEN.



FAN STATUS
THE CONTROLLER SHALL MONITOR THE FAN STATUS.
ALARMS SHALL BE PROVIDED AS FOLLOWS

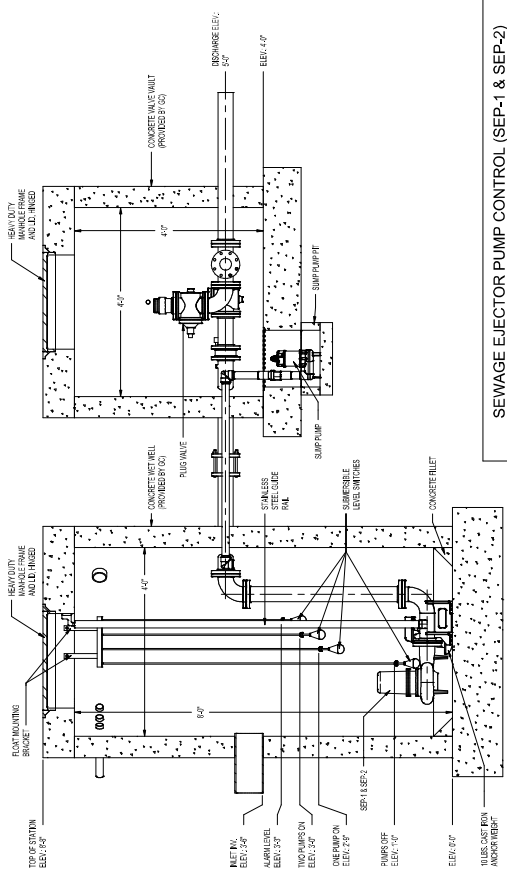

- FAN RUNTIME EXCEEDED BUT THE STATUS IS OPEN.
- FAN HANDLE COMMAND OPEN, BUT THE STATUS IS CLOSED.
- FAN HANDLE EXCEEDED BUT FAN STATUS RUNTIME EXCEEDS A USER
DEFINABLE LIMIT (X)X(1).

```

EXHAUST FAN POINTS LIST (EF-500W)

[illegible]

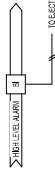
CONSULTANT		ARCHITECT/ENGINEER OF RECORD		STAMP		Division 14 MECHANICAL CONTROLS BID DOCUMENTS SUBMITTAL		Project Title VA CONTRACT NO: 36C24519C00171 Project Number 6134-19-103 Building Number 500	
		 Bancroft BANCROFT ARCHITECTS + ENGINEERS www.bancrofta.com				Office of Construction and Facilities Management		Location IRVING HOSPITAL VA MEDICAL CENTER Project Number 11424261 Drawing Number M706	
						Approved: Project Director		Division 030 RMI 030	
						U.S. Department of Veterans Affairs		Fully Sprinklered	
						VA			



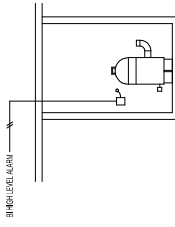
SEWAGE EJECTOR PUMP CONTROL (SEP-1 & SEP-2)

POINT NAME	HARDWARE POINTS				SOFTWARE POINTS				SHOW ON GRAPHIC	
	AI	AO	BI	BO	AV	BV	DO-ED	TREND		
HIGH LEVEL ALARM			X						X	X
CONTROL PANEL ALARM										X
PUMP-1 FAILURE			X						X	
PUMP-2 FAILURE			X						X	X

THE REMOTE MOUNTED CONTROL PANEL HAS A LOCAL ALARM AND HORN AND DRY CONTACTS FOR BAS ALARM/ARM INTERFACE. FROM THE CONTROL PANEL TRANSFORMER SIDE, THE 24 VOLT CONTROLLER SIGNALS PERFORM THE PUMP SEQUENCES (LEAD/LAG AND STAGES) FROM THE FOUR FLOAT SWITCHES LOCATED IN THE ELECTOR BASIN.



DUPLEX SEWAGE EJECTOR CONTROL DIAGRAM

[illegible]

PROVIDE SEPARATE FLOAT TO MONITOR HIGH LEVEL ALARM.

SUMP PUMP CONTROL DIAGRAM

SUMP PUMP SYSTEM POINTS LIST												
POINT NAME	HARDWARE POINTS				SOFTWARE POINTS				SHOW ON GRAPHIC			
	AI	AO	BI	BO	RV	SCRD	TRND	ALARM				
HIGH LEVEL ALARM			X					X				X

[illegible]

