

VA FORM 08-6231, OCT 1978

A
three inches = one foot
6"

B
one and one half inches = one foot
1 1/2" 6"

C
one inch = one foot
1" 6"

D
three quarters inch = one foot
3/4" 6"

E
one half inch = one foot
1/2" 6"

F
three eighths inch = one foot
3/8" 6"

one quarter inch = one foot
1/4" 6"

one eighth inch = one foot
1/8" 6"

GENERAL PLUMBING NOTES		GENERAL ABBREVIATIONS		GENERAL SYMBOLS		PIPING SYMBOLS			PLUMBING ALTERNATE LIST	
DESCRIPTIONS		ABBREVIATIONS		SYMBOLS		SYMBOLS			NUMBER	
TITLE		DESCRIPTIONS		DESCRIPTIONS		DESCRIPTIONS			TITLE	
<div>1. PLUMBING GENERAL NOTES, SYMBOLS, LISTS AND DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL PLUMBING DRAWINGS FOR THIS PROJECT.</div> <div>2. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND EXACT LOCATIONS AND ARRANGEMENTS OF EXIST NEW EQUIPMENT, DUCTWORK, PIPING AND OTHER COMPONENTS SHALL BE DETERMINED IN THE FIELD WITH DUE CONSIDERATION OF STRUCTURAL, ELECTRICAL AND ARCHITECTURAL SYSTEMS. EXISTING STRUCTURAL SYSTEMS SHALL NOT BE MODIFIED WITHOUT THE EXPRESS PERMISSION OF THE ENGINEER.</div> <div>3. THE PROJECT SHALL BE PHASED IN ACCORDANCE WITH THE APPROVED PHASING PLAN. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE PROJECT ENGINEER FOR THE SEQUENCING AND TIMING OF OPERATIONS PRIOR TO COMMENCING WORK. SEE SPECIFICATIONS.</div> <div>4. CONTRACTOR IS TO MAINTAIN SERVICE TO ROOMS OUTSIDE THE PROJECT SCOPE OF WORK AND PHASING SCHEDULE. IF INTERRUPTION OF SERVICE IS REQUIRED COORDINATE SHUTDOWN WITH PROJECT ENGINEER.</div> <div>5. CARE SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SYSTEMS AND SURFACES TO REMAIN. RESTORE DAMAGED AREAS THAT ARE BEYOND THE SCOPE OF THIS CONTRACT TO THEIR ORIGINAL CONDITION.</div> <div>6. MOST PARTITIONS ARE FULL HEIGHT AND REQUIRE UTILITIES PENETRATIONS TO BE SEALED. SEE ARCHITECTURAL DWGS FOR PARTITION HEIGHTS.</div> <div>7. TIE-IN POINT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL DETERMINE EXACT LOCATIONS IN THE FIELD BASED ON EXISTING CONDITIONS.</div> <div>8. COORDINATE THE LOCATIONS OF ALL WALL MOUNTED EQUIPMENT WITH FINAL EQUIPMENT/FURNITURE LAYOUT.</div> <div>9. AT THE END OF EACH WORKING DAY, THE CONSTRUCTION SITE SHALL BE LEFT IN A CLEAN AND NEAT CONDITION.</div> <div>10. INSTALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND GOOD PRACTICE NORMAL TO THE TRADE. INSTALLATION SHALL INCLUDE PROVISIONS FOR ACCESS TO NORMAL MAINTENANCE ITEMS.</div> <div>11. PROVIDE ADEQUATE STRUCTURAL SUPPORTS AND SECURE MOUNTING METHODS WITH PROVISIONS FOR VIBRATION ISOLATION AND EXPANSION WHERE REQUIRED.</div> <div>12. COORDINATE PENETRATIONS WITH GENERAL CONTRACTOR. SEE ARCHITECTURAL DRAWINGS FOR PENETRATION DETAILS. PLUMBING CONTRACTOR SHALL PROVIDE FLASHING AND COUNTER FLASHING FOR ROOF PENETRATIONS AS REQUIRED.</div> <div>13. PROVIDE PIPE SUPPORTS, GUIDES AND OFFSETS AS NECESSARY TO PREVENT UNDUE STRAIN ON PIPING.</div> <div>14. SEE DETAILS AND PIPING DIAGRAMS FOR ADDITIONAL VALVES AND FITTINGS NECESSARY FOR COMPLETE PIPING SYSTEMS.</div> <div>15. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.</div> <div>16. FIELD VERIFY CLEARANCES AND DIMENSIONS PRIOR TO INSTALLATION.</div> <div>17. SANITARY LINES 3" AND SMALLER SHALL SLOPE 1/4" PER FOOT UNLESS OTHERWISE NOTED. SANITARY LINES LARGER THAN 3" SHALL SLOPE 1/8" PER FOOT UNLESS OTHERWISE NOTED.</div>		AD AFF AP ARCH AS B.O.P. BS BTU BTUH C&H/W CO CONN CONTR CW DIA DN D DWG OR DWGS E, EX OR (E) EA EC ELECTRICAL CONTRACTOR FCO FD FDTP FPHB FPM FT GAL GC GPM GV H HP HW HWR I.P.C. ID IN KW MBH MECH MTD N.C. OR NC N.O. OR NO NIC NPW NTS OD PC PD PSI RD RM RV RWL S SD SF SP SS SW T.O.P. TYP V VB VTR W WI WCO	DUCT ACCESS DOOR ABOVE FINISHED FLOOR ACCESS PANEL ARCHITECT AIR SEPARATOR BOTTOM OF PIPE BELOW SLAB (TYPE "K" COPPER) BRITISH THERMAL UNIT BTUH THERMAL UNIT PER HOUR COLD & HOT WATER CLEAN OUT CONNECT CONTRACTOR COLD WATER DIAMETER DOWN DRAIN DRAWING(S) EXISTING EACH ELECTRICAL CONTRACTOR FLEXIBLE CONNECTION FLOOR CLEAN OUT FLOOR DRAIN FLOOR DRAIN W/ TRAP PRIMER FREEZE PROOF HOSE BIBB FEET PER MINUTE FEET GALLONS GENERAL CONTRACTOR GALLONS PER MINUTE GATE VALVE HEIGHT HORSE POWER HOT WATER HOT WATER RECIRCULATION INTERNATIONAL PLUMBING CODE INSIDE DIAMETER INCHES KILOWATTS THOUSANDS OF B.T.U.'S PER HOUR MECHANICAL MOUNTED NORMALLY CLOSED NORMALLY OPEN NOT IN CONTRACT NON-PORTABLE WATER NOT TO SCALE OUTSIDE DIAMETER PLUMBING CONTRACTOR PRESSURE DROP POUNDS PER SQUARE INCH ROOF DRAIN ROOM RELIEF VALVE RAIN WATER LEADER SANITARY SANITARY DRAIN SQUARE FEET STATIC PRESSURE STAINLESS STEEL SANITARY WASTE TOP OF PIPE TYPICAL VENT VACUUM BREAKER VENT THROUGH ROOF WASTE WITH WALL CLEANOUT	<div>RH-1</div> <div>1</div> <div>12"Ø 1/8"12"</div> <div>1/8"</div> <div>Ø</div>	EQUIPMENT DESIGNATION KEYNOTE CALL OUT PIPE SIZE (DIAMETER) AND SLOPE REVISION TAG REVISION CLOUD	<div>NEW PIPING</div> <div>HWR CW HW V</div> <div>NEW PIPING HOT WATER RECIRCULATION PIPING COLD WATER PIPING VENT PIPING PIPING BELOW FLOOR/UNDER SLAB PIPE DROP PIPE RISER PIPE TEES - DOWN PIPE TEES - UP PIPE CONNECTION PIPE BREAK - TO CONTINUE DIRECTION OF FLOW WATER METER PIPE SLOPE P-TRAP PIPE ANCHOR PIPE CAP PIPE GUIDE WATER HAMMER ARRESTOR UNION BALL VALVE GATE VALVE GLOBE VALVE THERMOMETER FLANGE STRAINER W/DRAIN VALVE AND CAP DRAIN VALVE AND CAP CONCENTRIC REDUCER (ENLARGER) FLOOR DRAIN FLOOR CLEAN OUT WALL HYDRANT</div> <div>ANCHOR GUIDE U BLV GV GLV T FLG CRD FD FCO WH</div>	NOTE: REFER TO ARCHITECTURAL DOCUMENTS FOR DEDUCT ALTERNATE ITEMS.			

100% BID DOCUMENTS

Revisions:

Date

CONSULTANTS:

SPECIFICATIONS:
Lowell Specifications
34 Marc Avenue
Topsham, ME 04802
Tel: (207) 406-4001
Email: keith@lowellspecs.com

ARCHITECT/ENGINEERS:

ARCHITECTURE
INTERIOR DESIGN
PLANNING
49 DARTMOUTH STREET
PORTLAND, ME 04101
207-775-1059
www.pdtarchs.com

482 Payne Road
Scarborough, ME 04074
Tel: (207) 883-3355
Fax: (207) 883-3376

75 York Street, Portland, Maine 04101
207.879.1838 ■ beckerstructural.com

Drawing Title
PLUMBING - LEGEND AND GENERAL NOTES

Approved: Project Director
Denis McLaughlin
Telephone: 857-364-5149

Project Title
WEST ROXBURY GARAGE

Location
VAMC - West Roxbury, MA 02132

Date
6/15/2015

Checked
DCL

Drawn
DJA

Project Number
523-400

Building Number

Drawing Number
PL001

Dwg: 50 of 99

Office of
Facilities
Management

Department of
Veterans Affairs

A

B

C

D

E

F

G

H

I

J

K

L

A

B

C

D

E

F

G

H

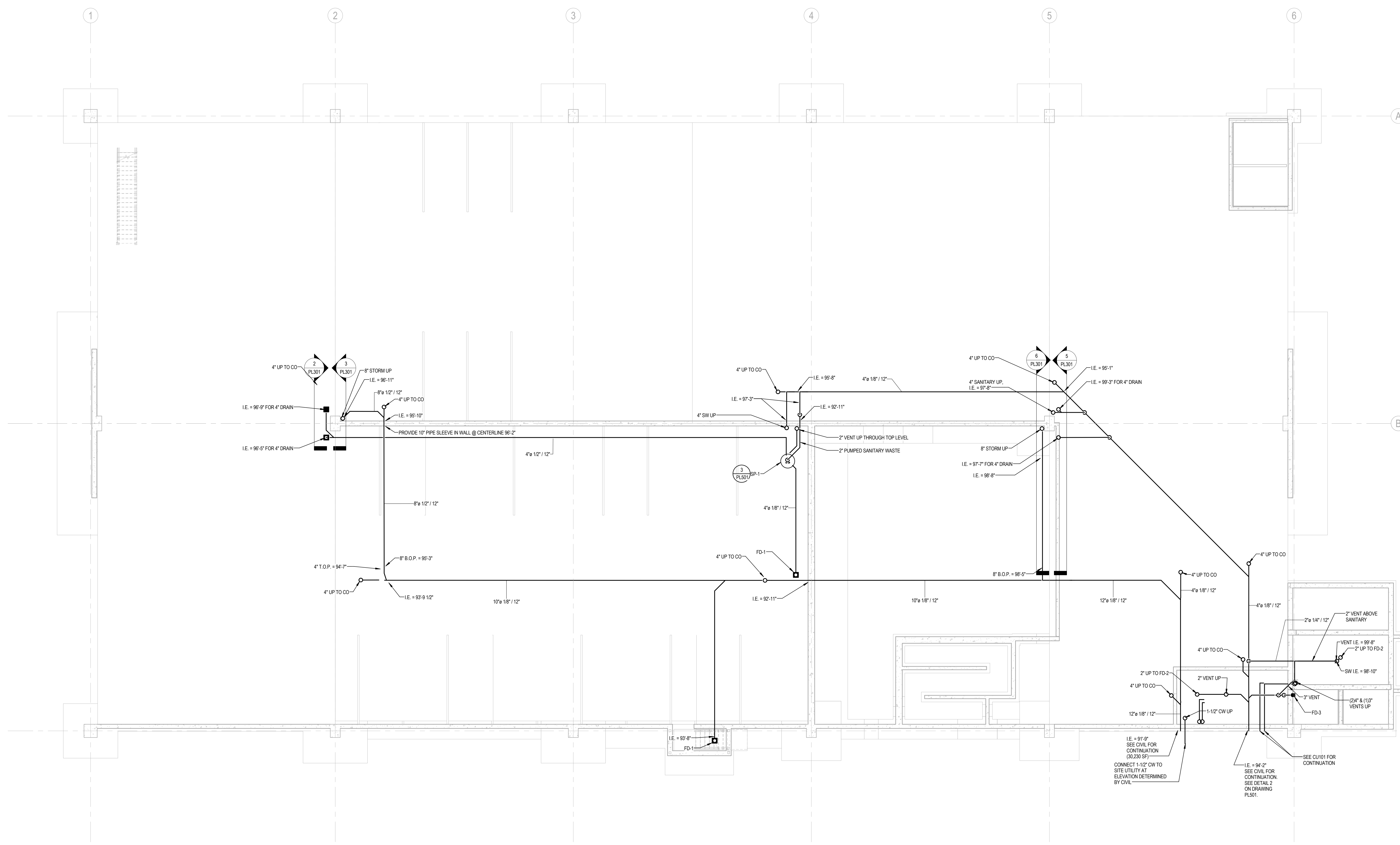
I

J

K

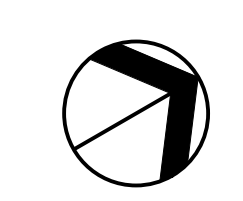
L

one eighth inch = one foot
one quarter inch = one foot
one half inch = one foot
three eighths inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
five inches = one foot
six inches = one foot
seven inches = one foot
eight inches = one foot
nine inches = one foot
ten inches = one foot
eleven inches = one foot
twelve inches = one foot
thirteen inches = one foot
fourteen inches = one foot
fifteen inches = one foot
sixteen inches = one foot
seventeen inches = one foot
eighteen inches = one foot
nineteen inches = one foot
twenty inches = one foot
twenty one inches = one foot
twenty two inches = one foot
twenty three inches = one foot
twenty four inches = one foot
twenty five inches = one foot
twenty six inches = one foot
twenty seven inches = one foot
twenty eight inches = one foot
twenty nine inches = one foot
thirty inches = one foot
thirty one inches = one foot
thirty two inches = one foot
thirty three inches = one foot
thirty four inches = one foot
thirty five inches = one foot
thirty six inches = one foot
thirty seven inches = one foot
thirty eight inches = one foot
thirty nine inches = one foot
forty inches = one foot
forty one inches = one foot
forty two inches = one foot
forty three inches = one foot
forty four inches = one foot
forty five inches = one foot
forty six inches = one foot
forty seven inches = one foot
forty eight inches = one foot
forty nine inches = one foot
fifty inches = one foot
fifty one inches = one foot
fifty two inches = one foot
fifty three inches = one foot
fifty four inches = one foot
fifty five inches = one foot
fifty six inches = one foot
fifty seven inches = one foot
fifty eight inches = one foot
fifty nine inches = one foot
sixty inches = one foot
sixty one inches = one foot
sixty two inches = one foot
sixty three inches = one foot
sixty four inches = one foot
sixty five inches = one foot
sixty six inches = one foot
sixty seven inches = one foot
sixty eight inches = one foot
sixty nine inches = one foot
seventy inches = one foot
seventy one inches = one foot
seventy two inches = one foot
seventy three inches = one foot
seventy four inches = one foot
seventy five inches = one foot
seventy six inches = one foot
seventy seven inches = one foot
seventy eight inches = one foot
seventy nine inches = one foot
eighty inches = one foot
eighty one inches = one foot
eighty two inches = one foot
eighty three inches = one foot
eighty four inches = one foot
eighty five inches = one foot
eighty six inches = one foot
eighty seven inches = one foot
eighty eight inches = one foot
eighty nine inches = one foot
ninety inches = one foot
ninety one inches = one foot
ninety two inches = one foot
ninety three inches = one foot
ninety four inches = one foot
ninety five inches = one foot
ninety six inches = one foot
ninety seven inches = one foot
ninety eight inches = one foot
ninety nine inches = one foot
one hundred inches = one foot



1 PLUMBING PLAN - UNDERSLAB
1/8" = 1'-0"

100% BID DOCUMENTS



<div>Revisions:</div> <table border="1"><thead><tr><th>No.</th><th>Description</th><th>Date</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>	No.	Description	Date									
	No.	Description	Date									

CONSULTANTS:

SPECIFICATIONS:
Lowell Specifications
34 Marc Avenue
Topsham, ME 04802
Tel: (207) 406-4001
Email: keith@lowellspecs.com

ARCHITECT/ENGINEERS:

ARCHITECTURE
INTERIOR DESIGN
PLANNING
49 DARTMOUTH STREET
PORTLAND, ME 04101
207-775-1059
www.pdtarchs.com

482 Payne Road
Scarborough, ME 04074
Tel: (207) 883-3355
Fax: (207) 883-3376

75 York Street, Portland, Maine 04101
207.879.1838 ■ beckerstructural.com

Drawing Title
PLUMBING - PLAN - UNDERSLAB

Approved: Project Director
Denis McLaughlin
Telephone: 857-364-5149

Project Title
WEST ROXBURY GARAGE

Location
VAMC - West Roxbury, MA 02132

Date
6/15/2015

Checked
DCL

Drawn
DJA

Project Number
523-400

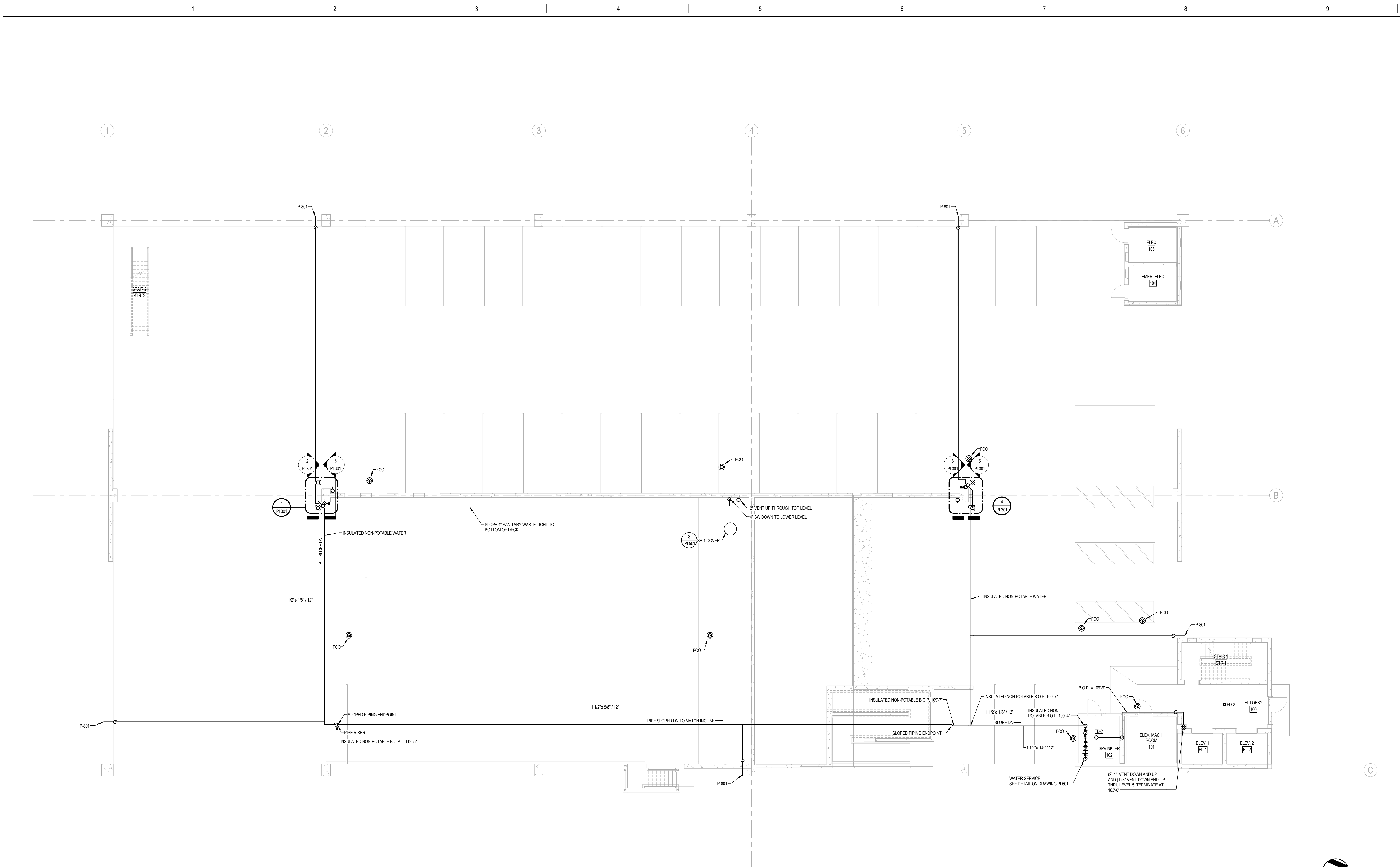
Building Number

Drawing Number
PL100

Dwg: 51 of 99

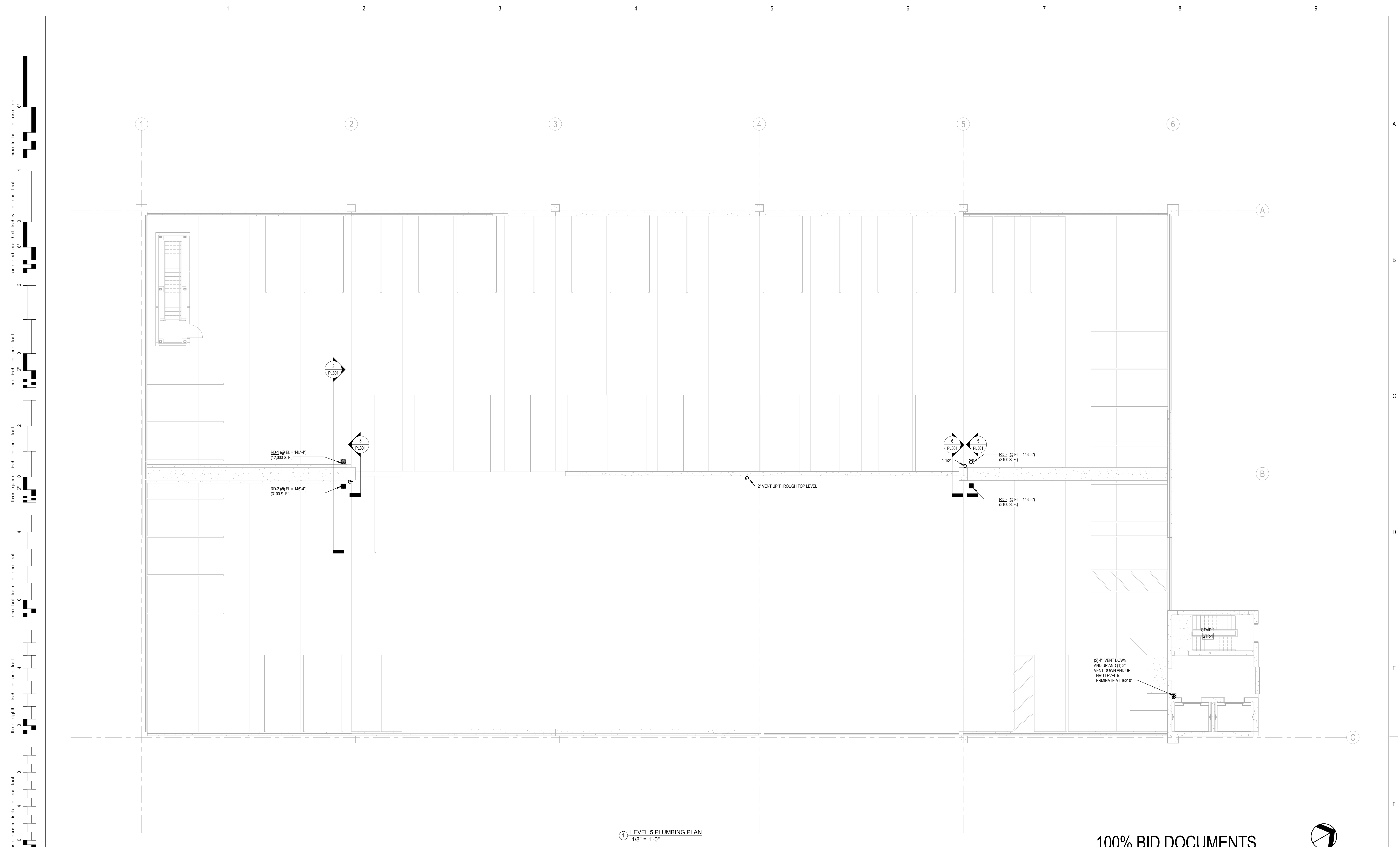
Office of
Facilities
Management

Department of
Veterans Affairs



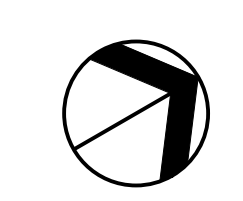
																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

100% BID DOCUMENTS



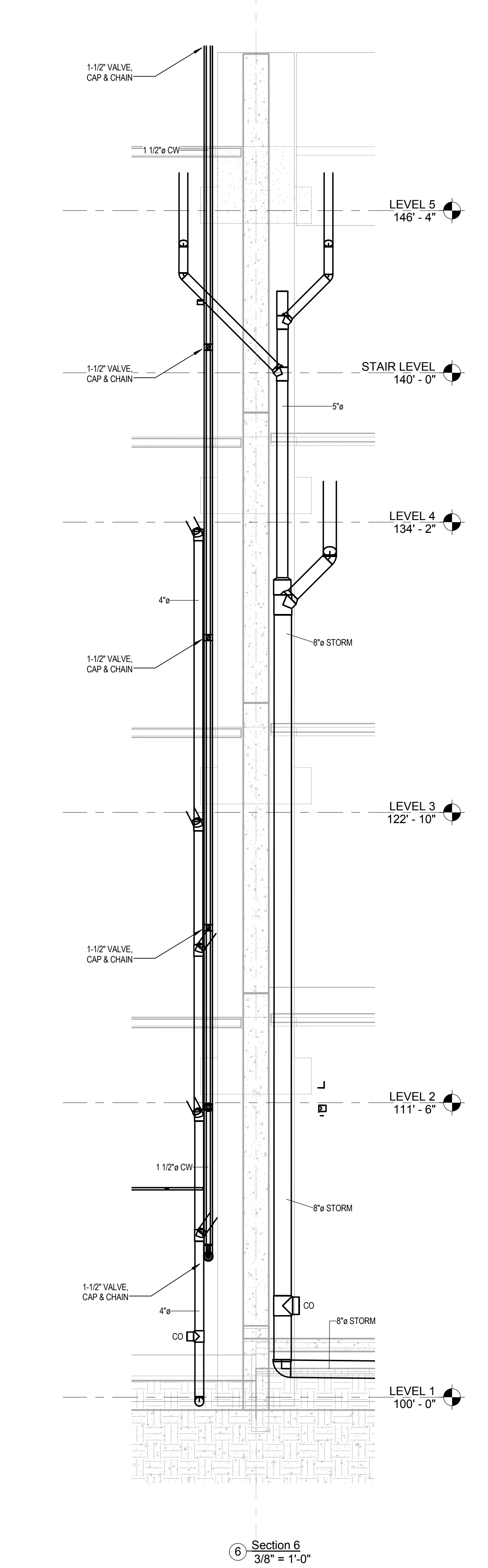
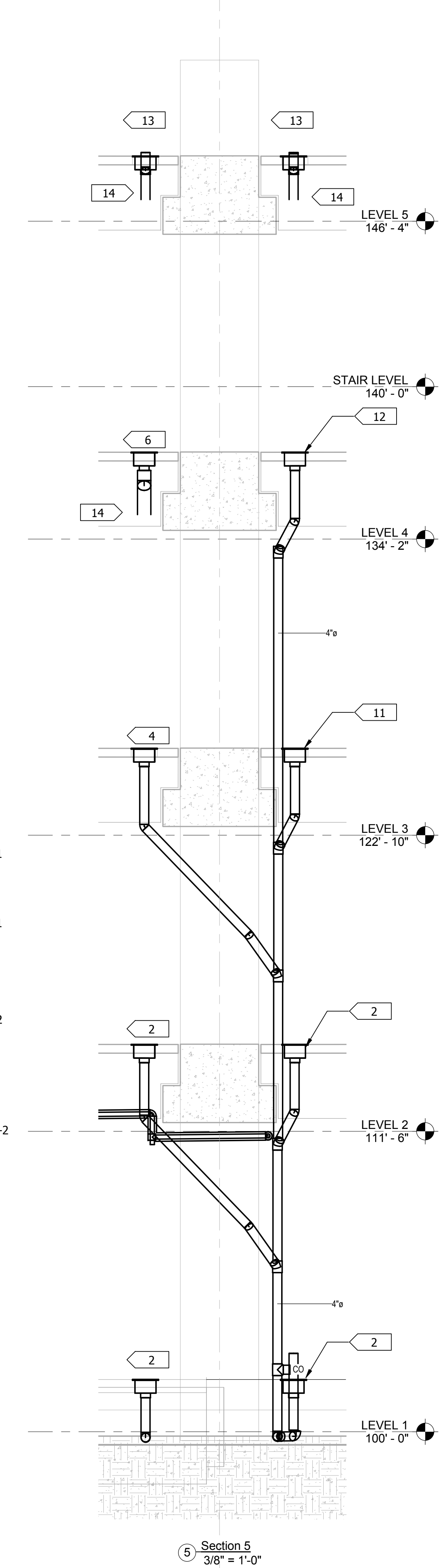
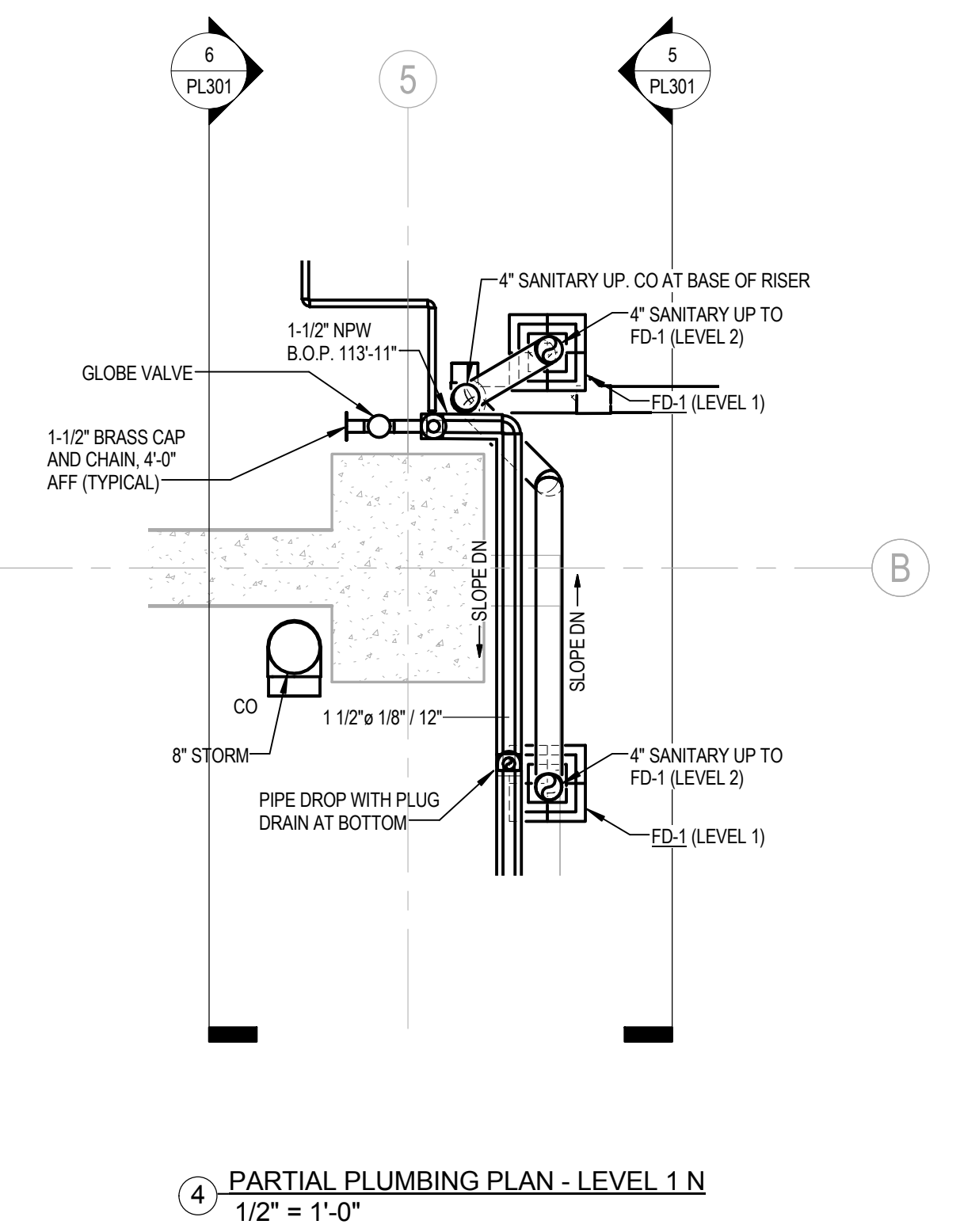
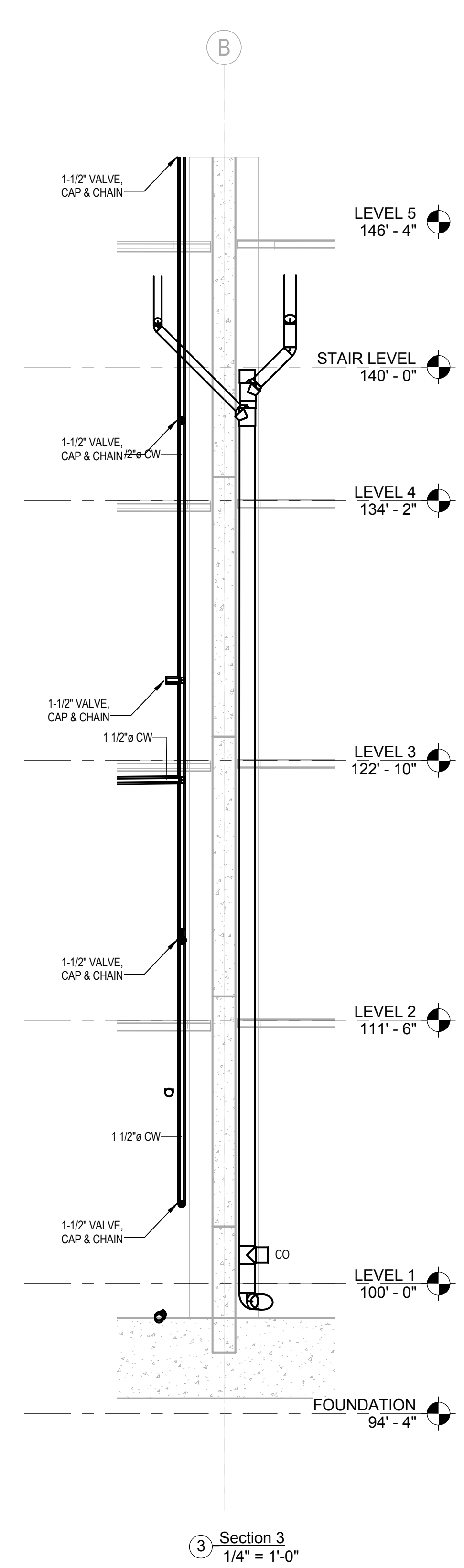
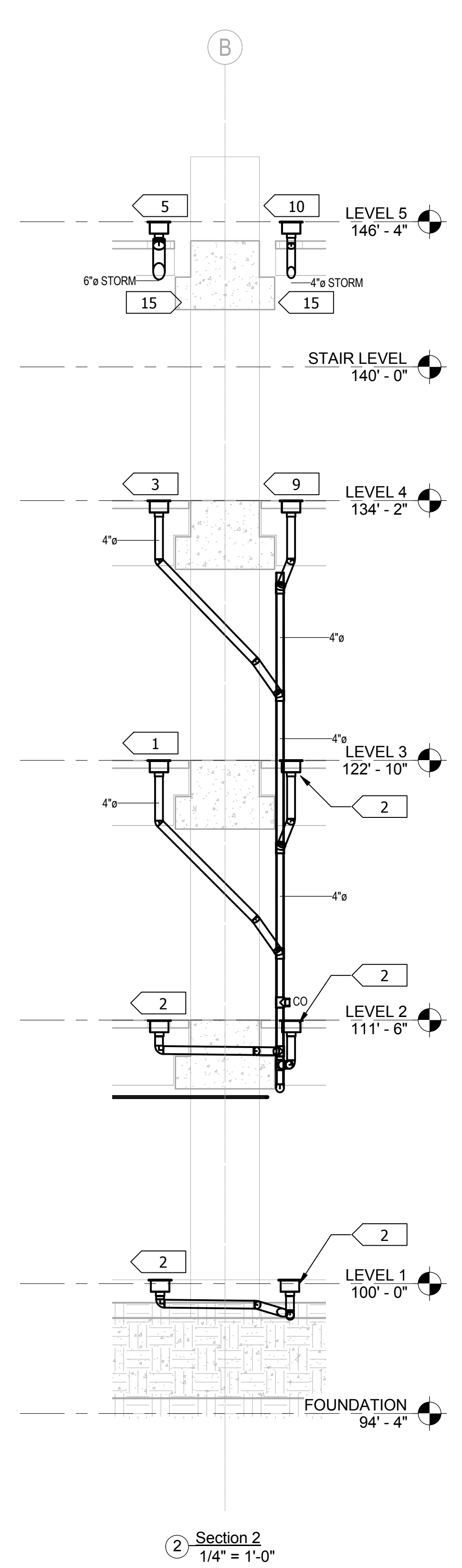
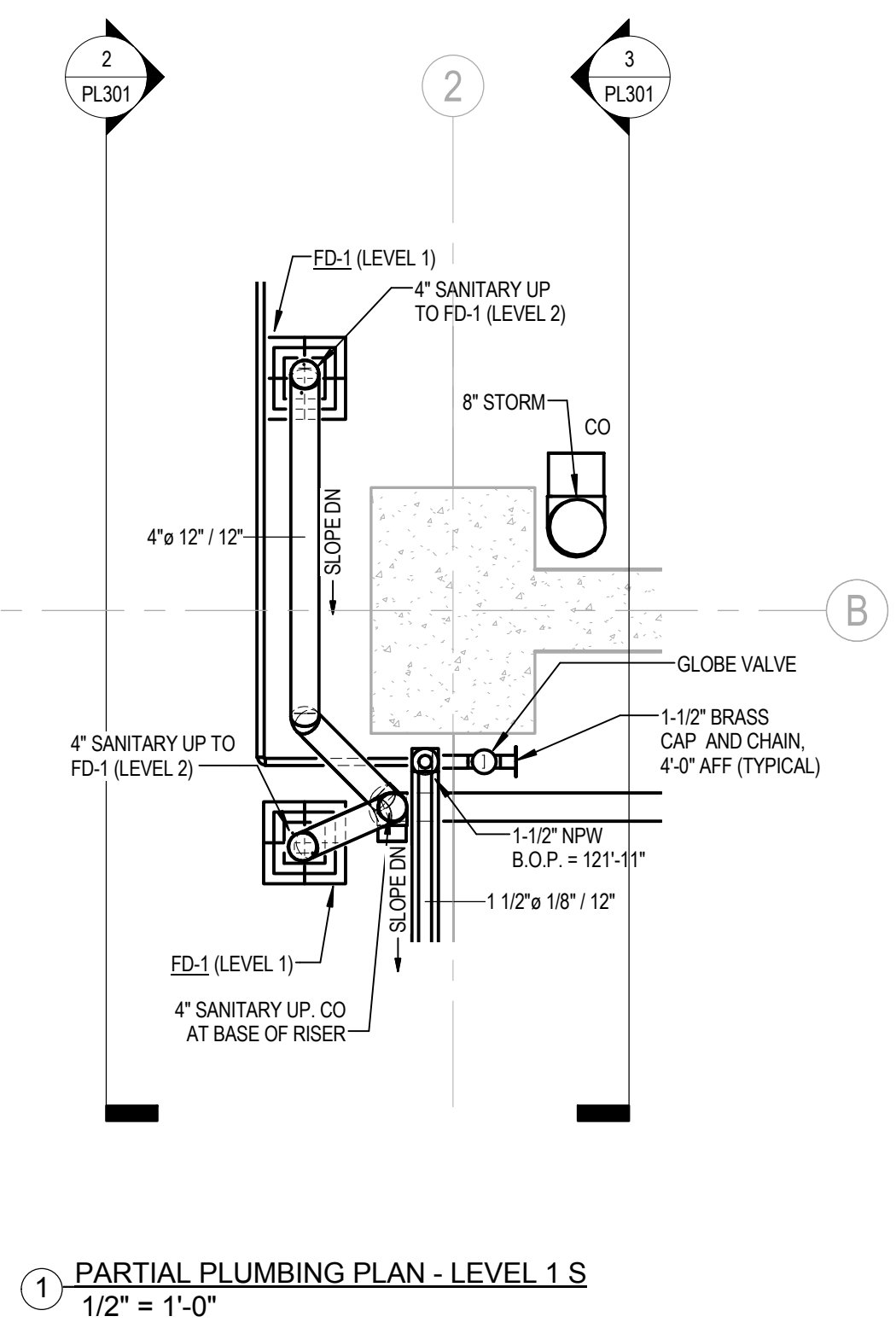
1 LEVEL 5 PLUMBING PLAN
1/8" = 1'-0"

100% BID DOCUMENTS



<div>Revisions:</div> <table border="1"><thead><tr><th>Rev</th><th>Description</th><th>Date</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>	Rev	Description	Date									
	Rev	Description	Date									

A
three inches = one foot
1
0
6
B
one and one half inches = one foot
2
0
6
C
one inch = one foot
2
0
6
D
three quarters inch = one foot
4
0
6
E
one half inch = one foot
4
0
6
F
three eighths inch = one foot
8
0
6
G
one quarter inch = one foot
16
0
6
H
one eighth inch = one foot
16
0
6



- DRAIN PHASING NOTES**
- RD-1 CONNECTED TO STORM DRAIN FOR PHASE 1. REPLACE RD-1 WITH FD-1 AND CONNECT TO SANITARY WASTE FOR PHASES 2 THROUGH 4.
 - FD-1 CONNECTED TO SANITARY WASTE FOR ALL PHASES.
 - RD-1 CONNECTED TO STORM DRAIN FOR PHASES 1 THROUGH 3. REPLACE RD-1 WITH FD-1 AND CONNECT TO SANITARY WASTE FOR PHASE 4.
 - RD-1 CONNECTED TO STORM DRAIN FOR PHASES 1 AND 2. REPLACE RD-1 WITH FD-1 AND CONNECT TO SANITARY WASTE FOR PHASES 3 AND 4.
 - RD-1 CONNECTED TO STORM DRAIN FOR PHASES 3 AND 4.
 - RD-1 CONNECTED TO STORM DRAIN FOR PHASES 2 AND 3. REPLACE RD-1 WITH FD-1 AND CONNECT TO SANITARY WASTE FOR PHASE 4.
 - NOT USED.
 - NOT USED.
 - RD-2 CONNECTED TO STORM DRAIN FOR PHASES 1 AND 2. REPLACE RD-2 WITH FD-1 AND CONNECT TO SANITARY WASTE FOR PHASES 3 AND 4.
 - RD-2 CONNECTED TO STORM DRAIN FOR PHASES 3 AND 4.
 - RD-2 CONNECTED TO STORM DRAIN FOR PHASE 1. REPLACE RD-2 WITH FD-1 AND CONNECT TO SANITARY WASTE FOR PHASES 2 THROUGH 4.
 - RD-2 CONNECTED TO STORM DRAIN FOR PHASES 2 AND 3. REPLACE RD-2 WITH FD-1 AND CONNECT TO SANITARY FOR PHASE 4.
 - RD-2 CONNECTED TO STORM DRAIN FOR PHASE 4.
 - SEE DETAIL 6 ON THIS SHEET FOR CONTINUATION.
 - SEE DETAIL 3 ON THIS SHEET FOR CONTINUATION.

100% BID DOCUMENTS

<div>Revisions:</div> <table border="1"><thead><tr><th>No.</th><th>Description</th><th>Date</th></tr></thead><tbody><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td></tr></tbody></table>	No.	Description	Date									
	No.	Description	Date									

CONSULTANTS:

SPECIFICATIONS:

Lowell Specifications
34 Marc Avenue
Topsham, ME 04802
Tel: (207) 406-4001
Email: keith@lowellspecs.com



LOCATE BASIN OUTSIDE OF BUILDING

OPENING SHALL BE NOT LESS THAN 24" DIA.

THE CATCH BASIN SHALL BE SO LOCATED AND
CONSTRUCTED THAT SURFACE WATER SHALL BE EXCLUDED.

INLET PIPE SHALL BE AT LEAST FOUR INCHES ABOVE NORMAL WATER LINE.

WHERE SUBJECT TO FROST OR CRUSHING CONDITIONS,
OUTLET SHALL BE AT LEAST THREE FEET BELOW THE
SURFACE.

THE NEW CATCH BASIN MUST BE FILLED WITH CLEAN WATER BEFORE USING, AND AFTER BEING EMPTIED FOR PERIODIC CLEANING.

ALL OIL AND GASOLINE MUST BE REMOVED BEFORE
CLEANING OUT THE BASIN, AND MUST NOT BE
DISCHARGED INTO THE SEWER THROUGH OTHER FIXTURES.

WROUGHT IRON STEPS SHALL BE SPACED ABOUT 18" APART.

BOTH VENTS SHALL BE EXTENDED INDEPENDENTLY 18" ABOVE THE ROOF, OR AS APPROVED BY THE LOCAL AUTHORITIES, AND THE AUTHORITIES OF THE M.W.R.A.

(Outlet pipe to be 45 degree angle)

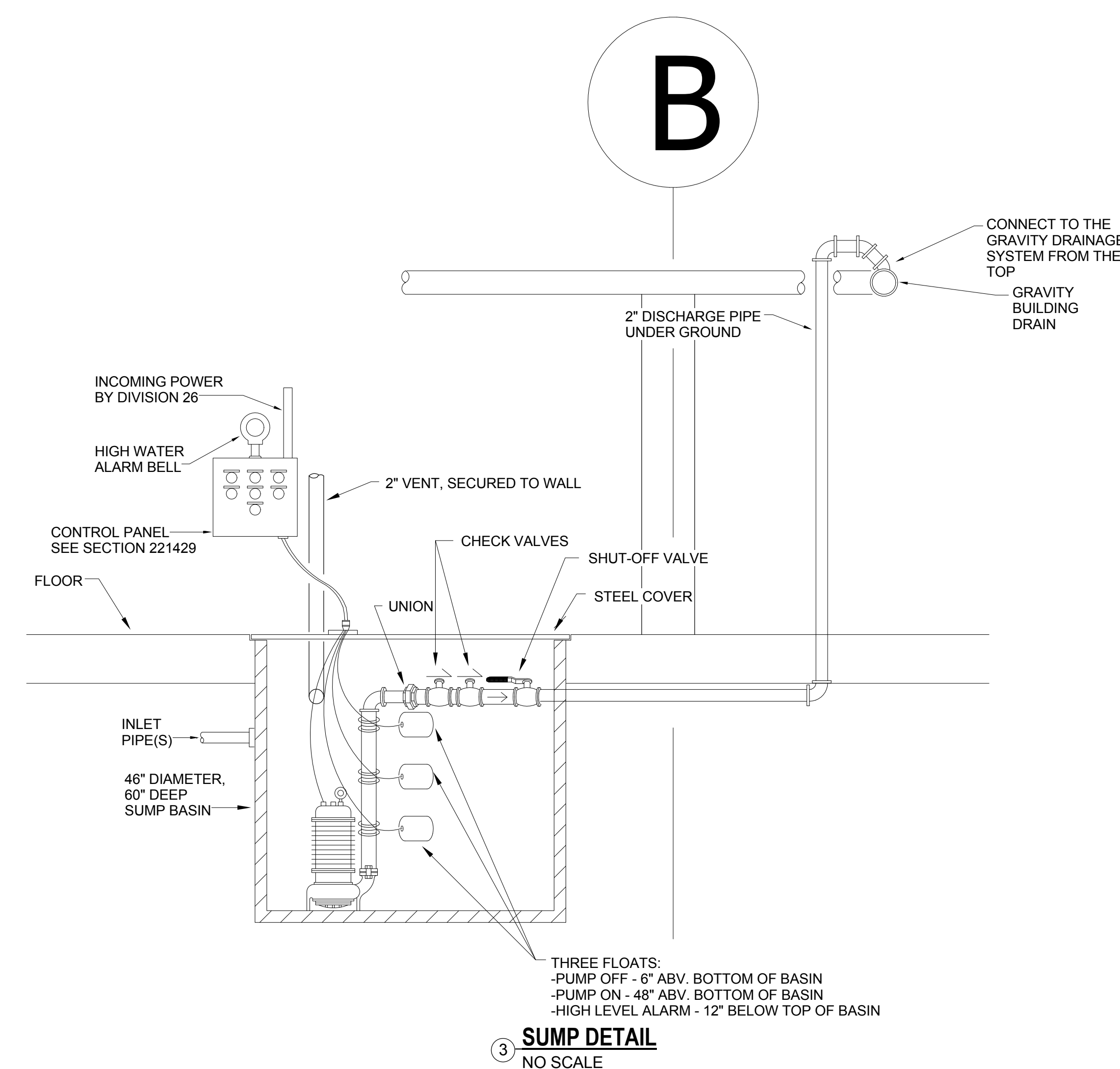
REFER TO DRAWING CU101 FOR LOCATION OF INTERCEPTOR.

PLAN TAG	TYPE	DRAIN TYPE	CONNECTIONS (INCHES)			REMARKS
			WASTE	TRAP	VENT	
RD-1	FD-Y	RAMP STORM DRAIN	6	-	-	12" SQUARE STRAINER
RD-2	FD-Y	RAMP STORM DRAIN	4	-	-	12" SQUARE STRAINER
FD-1	FD-Y	FLOOR DRAIN	4	-	-	GARAGE AREA, STAIRWAY
FD-2	FD-C	FLOOR DRAIN	2	2	1-1/2	
FD-3	5"x7"	ELEV. PIT DRAIN	3	3	3	JOSAM MODEL 85223 OR EQUAL

[illegible]

REMARKS:

1. PROVIDE WITH SIMPLEX PUMP CONTROL PANEL, FLOATS AND AUDIBLE ALARM.



3 **SUMP DETAIL**
NO SCALE

		CONSULTANTS:				ARCHITECT/ENGINEERS:		<div><div><div>ARCHITECTURE INTERIOR DESIGN PLANNING</div></div><div>49 DARTMOUTH STREET PORTLAND, ME 04101 Tel: 207-775-1059 www.pdtarchts.com</div><div><div>482 Payne Road Scarborough, ME 04104 Tel: (207) 883-3366 Fax: (207) 883-3376</div></div><div><div>75 York Street, Portland, Maine 04101 207.879.1838 ■ beckerstructural.com</div></div></div>		<div>Drawing Title PLUMBING - DETAILS AND SCHEDULES</div> <div>Approved: Project Director Denis McLaughlin Telephone: 857-364-5149</div>		<div>Project Title WEST ROXBURY GARAGE</div> <div>Location VAMC - West Roxbury, MA 02132</div> <div>Date 6/15/2015</div>		<div>Project Number 523-400</div> <div>Building Number</div> <div>Drawing Number PL501</div> <div>Checked DCL</div>		<div>Drawn DJA</div> <div>Dwg: 56 of 99</div>		<div>Office of Facilities Management</div> <div> Department of Veterans Affairs</div>	
Revisions:		Date																	

A

B

C

D

E

F

A

B

C

D

E

F

HVAC GENERAL NOTES	GENERAL ABBREVIATIONS	PIPING SYMBOLS	GENERAL SYMBOLS	DUCTWORK SYMBOLS																								
<div>DESCRIPTIONS</div> <div>1. ALL HVAC GENERAL NOTES, SYMBOLS LISTS & DETAILS ARE TO BE CONSIDERED AS APPLICABLE TO ALL HVAC DRAWINGS FOR THIS PROJECT.</div> <div>2. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND EXACT LOCATIONS AND ARRANGEMENTS OF EXISTING NEW EQUIPMENT, DUCTWORK, PIPING AND OTHER COMPONENTS SHALL BE DETERMINED IN THE FIELD WITH DUE CONSIDERATION OF STRUCTURAL, ELECTRICAL AND ARCHITECTURAL SYSTEMS. EXISTING STRUCTURAL SYSTEMS SHALL NOT BE MODIFIED WITHOUT THE EXPRESS PERMISSION OF THE ENGINEER.</div> <div>3. THE PROJECT SHALL BE PHASED IN ACCORDANCE WITH THE APPROVED PHASING PLAN. THE CONTRACTOR SHALL OBTAIN APPROVAL FOR THE SEQUENCING AND TIMING OF OPERATIONS PRIOR TO COMMENCING WORK. SEE SPECIFICATIONS.</div> <div>4. CONTRACTOR IS TO MAINTAIN SERVICE TO ROOMS OUTSIDE THE PROJECT SCOPE OF WORK AND PHASING SCHEDULE. IF INTERRUPTION OF SERVICE IS REQUIRED COORDINATE SHUTDOWN.</div> <div>5. CARE SHALL BE TAKEN BY THE CONTRACTOR TO PROTECT EXISTING SYSTEMS AND SURFACES TO REMAIN. RESTORE DAMAGED AREAS THAT ARE BEYOND THE SCOPE OF THIS CONTRACT TO THEIR ORIGINAL CONDITION.</div> <div>6. WHERE INDICATED ON THE DRAWINGS, REMOVE OR RELOCATE EXISTING COMPONENTS AS REQUIRED TO ACCOMMODATE THE NEW WORK. REMOVALS SHALL INCLUDE ALL ASSOCIATED OFF-SITE DISPOSAL COSTS.</div> <div>7. COORDINATE REMOVALS AND RELOCATIONS INCLUDING SELECTIVE CUTTING AND PENETRATIONS WITH ARCHITECTURAL, MECHANICAL, STRUCTURAL, AND ELECTRICAL CONTRACTORS.</div> <div>8. MOST PARTITIONS ARE FULL HEIGHT AND REQUIRE UTILITIES PENETRATIONS TO BE SEALED. SEE ARCHITECTURAL DWGS FOR PARTITION HEIGHTS. UTILITIES SHOWN FOR CLARITY THAT MAY RUN PARALLEL TO WALL PARTITIONS WILL REQUIRE LOCATING IN THE FIELD TO MINIMIZE CONFLICT WITH PARTITIONS.</div> <div>9. COORDINATE THE LOCATIONS OF ALL WALL MOUNTED TEMPERATURE SENSORS WITH FINAL EQUIPMENT/FURNITURE LAYOUT.</div> <div>10. MANUFACTURERS NAME & MODEL NUMBER ARE USED FOR DESCRIPTIVE PURPOSES ONLY & ARE INTENDED TO INDICATE THE STANDARD OF MATERIAL OR ARTICLES REQUIRED.</div> <div>11. INSTALL EQUIPMENT IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND GOOD PRACTICE NORMAL TO THE TRADE. INSTALLATION SHALL INCLUDE PROVISIONS FOR ACCESS TO NORMAL MAINTENANCE ITEMS SUCH AS BELTS, BEARINGS, FILTERS AND MOTORS. PROVIDE ADEQUATE STRUCTURAL SUPPORTS AND SECURE MOUNTING METHODS WITH PROVISIONS FOR VIBRATION ISOLATION AND EXPANSION WHERE REQUIRED.</div> <div>12. PROVIDE VOLUME DAMPERS DOWN STREAM OF VAV BOXES AT EACH BRANCH FROM MAIN DUCTWORK AND DUCT RUNNOUTS. PROVIDE OPPOSED BLADE DAMPERS AT EACH NECK TO AN INDIVIDUAL REGISTER OR DIFFUSER IN SUPPLY, RETURN AND EXHAUST DUCTS RESPECTIVE OF WHETHER OR NOT A DAMPER IS INDICATED ON THE PLANS.</div> <div>13. DIFFUSER SIZES INDICATED ARE NECK SIZES. REGISTERS & GRILLES ARE INDICATED AS NOMINAL SIZES.</div> <div>14. PERFORM ALL TESTS BEFORE INSULATING.</div> <div>15. PIPING AND DUCTWORK SHALL BE CONCEALED UNLESS OTHERWISE NOTED.</div> <div>16. INSTALLATION SHALL PERMIT ACCESSIBILITY FOR SERVICE AND/OR REPLACEMENT OF EQUIPMENT PROVIDED. PROVIDE ACCESS PANELS TO GAIN ACCESS TO SYSTEMS COMPONENTS THAT REQUIRE MAINTENANCE ACCORDING TO MANUFACTURERS LITERATURE.</div> <div>17. PROVIDE DUCTWORK WITH OFFSETS AND TRANSITIONS AS REQUIRED TO FIT UNDER STRUCTURAL STEEL OR OTHER OBSTRUCTIONS. FLAT OVAL OR ROUND SIZES MAY BE USED INTERCHANGEABLY BY THE CONTRACTOR. MAINTAIN DUCT CROSS SECTIONAL AREA. CHANGES SHALL BE ONLY IN ACCORDANCE WITH APPROVED SHOP DRAWINGS OR WRITTEN PERMISSION OF THE VA PROJECT ENGINEER.</div> <div>18. PROVIDE CLAMPS, OFFSETS, EXPANSION JOINTS, ANCHORS & GUIDES AS NECESSARY TO PREVENT UNDUE STRAIN ON PIPING.</div> <div>19. SEE DETAILS & PIPING DIAGRAMS FOR ADDITIONAL VALVES & FITTINGS NECESSARY FOR COMPLETE PIPING SYSTEM.</div> <div>20. MECHANICAL CONTRACTOR TO COORDINATE ALL WORK WITH OTHER BUILDING TRADES. SOME RELOCATION OF EXISTING UTILITIES MAY BE NECESSARY TO ACCOMMODATE INSTALLATION OF NEW EQUIPMENT OR DUCTWORK.</div> <div>21. PROVIDE FIRE OR FIRE/SMOKE DAMPERS WHERE INDICATED ON PLANS & WHERE REQUIRED BY APPLICABLE CODES FOR DUCTS & OPENINGS THROUGH FLOORS, FIRE WALLS & FIRE PARTITIONS. DAMPERS SHALL BE ENCLOSED IN #14 GAUGE STEEL SLEEVE. PROVIDE ACCESS DOORS LOCATED SO THAT FUSIBLE LINK & OTHER DAMPER COMPONENTS MAY BE INSPECTED REPLACED AND/OR SERVICED.</div> <div>22. SEE SPECIFICATIONS FOR OTHER REQUIREMENTS.</div> <div>23. AT THE END OF EACH WORKING DAY, THE CONSTRUCTION SITE SHALL BE LEFT IN A CLEAN AND NEAT CONDITION.</div> <div>24. FIELD VERIFY EXISTING EQUIPMENT, DUCTWORK AND PIPING PRIOR TO REMOVAL OR REUSE. CONFIRM WITH HOSPITAL THAT ALL EQUIPMENT, DUCTWORK AND PIPING DESIGNATED TO BE REMOVED IS NO LONGER IN SERVICE PRIOR TO ITS REMOVAL.</div> <div>25. EXISTING EQUIPMENT, DUCTWORK AND PIPING TO REMAIN IN SERVICE SHALL BE INSPECTED. ANY EQUIPMENT FOUND TO BE INOPERABLE SHALL BE REPORTED TO THE PROJECT ENGINEER.</div> <div>26. INFILL ALL NEW OR EXISTING ABANDONED FLOOR SLAB PENETRATIONS WITH GROUT. FULL THICKNESS OF SLAB. MAINTAIN 2 HR FIRE RATING. ALL EXISTING CONCRETE FLOORS AND CHASES ARE 2 HOUR FIRE RATED.</div> <div>27. FILL AND PATCH ALL OPENINGS IN WALLS WHERE CONDUTS, PIPES, DUCTS ETC. ARE OR HAVE BEEN REMOVED WITH UL LISTED FIRE ASSEMBLY APPROVED BY THE ARCHITECT. MAINTAIN 2 HR FIRE RATING WHERE APPLICABLE.</div> <div>28. ALL UNUSED (ABANDONED) DUCTWORK, PIPING AND EQUIPMENT INDICATED TO BE REMOVED SHALL BE REMOVED AND CAPPED.</div> <div>29. TIE-IN POINT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL DETERMINE EXACT LOCATIONS IN THE FIELD BASED ON EXISTING CONDITIONS.</div>	<div>ABBREVIATIONS</div> <div>DESCRIPTIONS</div> <div>AD DUCT ACCESS DOOR</div> <div>AFB ABOVE FINISHED FLOOR</div> <div>AFG ABOVE FINISH GRADE</div> <div>AP ACCESS PANEL</div> <div>AS AIR SEPARATOR</div> <div>ATC AUTOMATIC TEMPERATURE CONTROL</div> <div>BFP BACK FLOW PREVENTER</div> <div>BOD BOTTOM OF DUCT</div> <div>BTU BRITISH THERMAL UNIT</div> <div>BTUH BRITISH THERMAL UNIT PER HOUR</div> <div>C CONVECTOR</div> <div>CAHW COLD & HOT WATER</div> <div>CAP CAPACITY</div> <div>CC COOLING COIL</div> <div>CO CO</div> <div>CFM CUBIC FEET PER MINUTE</div> <div>COL COLUMN</div> <div>CONN CONNECT</div> <div>CV CONTROL VALVE</div> <div>DB DRY BULB TEMPERATURE</div> <div>DDC DIRECT DIGITAL CONTROL</div> <div>DA DIAMETER</div> <div>DN DOWN</div> <div>DO DIGITAL OUTPUT</div> <div>DO DO</div> <div>DWGS OR DWGS</div> <div>E, EX OR (E) EXISTING</div> <div>EA EXHAUST AIR</div> <div>EAT ENTERING AIR TEMPERATURE</div> <div>EC ELECTRICAL CONTRACTOR</div> <div>ECU EVAPORATIVE CONDENSING UNIT</div> <div>EF EXHAUST FAN</div> <div>EG EXHAUST AIR GRILLE</div> <div>EL EXPANSION LOOP</div> <div>EMS ENERGY MANAGEMENT SYSTEM</div> <div>ER EXHAUST AIR REGISTER</div> <div>ERV EXHAUST ON ROOF</div> <div>ESP EXTERNAL STATIC PRESSURE</div> <div>ET EXPANSION TANK</div> <div>ETO EXISTING NORMAL TO THE TRADE</div> <div>ETR ESTHYLENE OXIDE</div> <div>EWT ENTERING WATER TEMPERATURE</div> <div>EXH EXHAUST</div> <div>FA FREE AREA</div> <div>FC FLEXIBLE CONNECTION</div> <div>FD FIRE DAMPER</div> <div>FLA FULL LOAD AMPS</div> <div>FLR FLOOR</div> <div>FT FEET PER INCH</div> <div>FFM FEET PER MINUTE</div> <div>FSD COMBINATION FIRE AND SMOKE DAMPER</div> <div>FT FEET</div> <div>FTR REHEAT HOT WATER SUPPLY PIPING</div> <div>GAL GALLONS</div> <div>GC GENERAL CONTRACTOR</div> <div>GE GENERAL EXHAUST</div> <div>GPM GALLONS PER MINUTE</div> <div>HC HEATING COIL</div> <div>HP HORSE POWER</div> <div>HVAC HEATING, VENTILATION AND AIR COND.</div> <div>ID ID</div> <div>HW HOT WATER</div> <div>IN INSIDE DIAMETER</div> <div>IN IN</div> <div>IN IN</div> <div>KW KILOWATTS</div> <div>L LOUVER</div> <div>LAT LEAVING AIR TEMPERATURE</div> <div>LWT LEAVING WATER TEMPERATURE</div> <div>MBH THOUSANDS OF B.T.U.'S PER HOUR</div> <div>MD MOUNTED DAMPER</div> <div>MECH MECHANICAL</div> <div>MTD MOUNTED</div> <div>N.C. OR NC NORMALLY CLOSED</div> <div>N.O. OR NO NORMALLY OPEN</div> <div>NIC NOT IN CONTRACT</div> <div>NOM NOMINAL</div> <div>NTS NOT TO SCALE</div> <div>O.A. OR OA OUTSIDE AIR</div> <div>OAT OUTSIDE AIR TEMPERATURE</div> <div>OBD OPPOSED BLADE DAMPER</div> <div>OD OUTSIDE DIAMETER</div> <div>OED OPEN ENDED DUCT</div> <div>PC PLUMBING CONTRACTOR</div> <div>PD PRESSURE DROP</div> <div>PSI POUNDS PER SQUARE INCH</div> <div>PRV PRESSURE REGULATING VALVE</div> <div>RA RETURN AIR</div> <div>REF RETURN EXHAUST FAN</div> <div>RF RETURN FAN</div> <div>RG RETURN AIR GRILLE</div> <div>RHRH REHEAT WATER RETURN</div> <div>RHWS REHEAT WATER SUPPLY</div> <div>RM ROOM</div> <div>RR RETURN AIR REGISTER</div> <div>RV RELIEF VALVE</div> <div>SA SUPPLY AIR</div> <div>SAT SUPPLY AIR TEMPERATURE</div> <div>SF SQUARE FEET</div> <div>SP STATIC PRESSURE</div> <div>SPO SPEED</div> <div>SPEC SPECIFICATION</div> <div>SR SUPPLY AIR REGISTER</div> <div>SS STAINLESS STEEL</div> <div>MPV MULTIPURPOSE VALVE</div> <div>TOD TOP OF DUCT</div> <div>TSTAT THERMOSTAT</div> <div>TYP TYPICAL</div> <div>UG UNDER GRADE</div> <div>U.S. UNDER SLAB</div> <div>FLC UNDERCUT DOOR</div> <div>V VENT</div> <div>VAV VARIABLE AIR VOLUME</div> <div>VB VACUUM BREAKER</div> <div>VFD VARIABLE FREQUENCY DRIVE</div> <div>VTR VENT THROUGH ROOF</div> <div>W WASTE</div> <div>W W</div> <div>WB WET BULB TEMPERATURE (°F)</div> <div>WMS WIRE MESH SCREEN</div>	<div>SYMBOLS</div> <div>ABBREVIATIONS</div> <div>DESCRIPTIONS</div> <div>— G — G GAS PIPING</div> <div>— GS — GS GLYCOL SUPPLY</div> <div>— GR — GR GLYCOL RETURN</div> <div>— RS — RS REFRIGERANT SUCTION</div> <div>— RL — RL REFRIGERANT LIQUID</div> <div>— RHG — RHG REFRIGERANT HOT GAS</div> <div>— D — D A.C. CONDENSATE DRAIN</div> <div>— MUW — MUW MAKE UP WATER</div> <div>— PC — PC PUMPED CONDENSATE</div> <div>— HPC — HPC HIGH-PRESSURE CONDENSATE</div> <div>— BBD — BBD BOILER BLOWDOWN</div> <div>— FOD — FOD FUEL OIL DISCHARGE</div> <div>— FOG — FOG FUEL OIL GAGE</div> <div>— FOS — FOS FUEL OIL SUCTION</div> <div>— FOR — FOR FUEL OIL RETURN</div> <div>— FOV — FOV FUEL OIL TANK VENT</div> <div>— MTWS — MTWS MEDIUM-TEMPERATURE HOT WATER SUPPLY</div> <div>— HTWS — HTWS HIGH-TEMPERATURE HOT WATER SUPPLY</div> <div>— MTWR — MTWR MEDIUM-TEMPERATURE HOT WATER RETURN</div> <div>— HTWR — HTWR HIGH-TEMPERATURE HOT WATER RETURN</div> <div>— SAN — SAN SANITARY DRAIN ABOVE FLOOR OR GRADE</div> <div>— CHEM — CHEM CHEMICAL SUPPLY PIPES</div> <div>— CHWS — CHWS CHILLED WATER SUPPLY PIPING</div> <div>— CHWR — CHWR CHILLED WATER RETURN PIPING</div> <div>— CWS — CWS CONDENSER WATER SUPPLY</div> <div>— CWR — CWR CONDENSER WATER RETURN</div> <div>— HPS — HPS HIGH PRESSURE STEAM</div> <div>— HWS — HWS HOT WATER SUPPLY PIPING</div> <div>— HWR — HWR HOT WATER RETURN PIPING</div> <div>— RHWS — RHWS REHEAT HOT WATER SUPPLY PIPING</div> <div>— RHRW — RHRW REHEAT HOT WATER RETURN PIPING</div> <div>— LPC — LPC LOW PRESSURE CONDENSATE RETURN</div> <div>— LPS — LPS LOW PRESSURE STEAM</div> <div>— MPC — MPC MEDIUM PRESSURE CONDENSATE RETURN</div> <div>— MPS — MPS MEDIUM PRESSURE STEAM</div> <div>— CW — CW COLD WATER PIPING</div> <div>— HW — HW HOT WATER PIPING</div> <div>— HWR — HWR HOT WATER RETURN PIPING</div> <div>— V — V VENT PIPING</div> <div>— — PIPE DROP</div> <div>— — PIPE RISER</div> <div>— — PIPE TEE - DOWN</div> <div>— — PIPE TEE - UP</div> <div>— — PIPE CONNECTION</div> <div>— — PIPE BREAK - TO CONTINUE</div> <div>— — DIRECTION OF FLOW</div> <div>— — PIPE ANCHOR</div> <div>— — PIPE CAP</div> <div>— — PIPE GUIDE</div> <div>— — EXPANSION JOINT</div> <div>— — UNION</div> <div>— — BALL VALVE</div> <div>— — BUTTERFLY VALVE</div> <div>— — SWING CHECK VALVE</div> <div>— — CIRCUIT BALANCE VALVE</div> <div>— — 2-WAY AUTOMATIC CONTROL VALVE</div> <div>— — 3-WAY AUTOMATIC CONTROL VALVE (MIXING PATTERN)</div> <div>— — GATE VALVE</div> <div>— — GLOBE VALVE</div> <div>— — MULTIPURPOSE VALVE</div> <div>— — PRESSURE REGULATING VALVE</div> <div>— — THERMOMETER</div> <div>— — FLG FLANGE</div> <div>— — STRAINER W/DRAIN VALVE AND CAP</div> <div>— — RELIEF OR SAFETY VALVE</div> <div>— — PLUG VALVE</div> <div>— — REDUCED PRESSURE BACKFLOW PREVENTOR</div> <div>— — PIPE SLOPE</div> <div>— — ANCHOR</div> <div>— — GUIDE</div> <div>— — U</div> <div>— — BLV</div> <div>— — BVF</div> <div>— — SCV</div> <div>— — CBV</div> <div>— — ACV</div> <div>— — GV</div> <div>— — GLV</div> <div>— — MPV</div> <div>— — PRV</div> <div>— — T</div> <div>— — FLG</div> <div>— — RSV</div> <div>— — PGV</div> <div>— — RBPB</div>	<div>SYMBOLS</div> <div>DESCRIPTIONS</div> <div>POINT OF CONNECTION TO EXISTING</div> <div>LIMIT OF DEMOLITION</div> <div>EQUIPMENT, GRILLE, REGISTER OR DIFFUSER TAG</div> <div>DIFFUSER, REGISTER OR GRILLE TAG, WITH CFM AIRFLOW</div> <div>REVISION TAG</div> <div>REVISION CLOUD</div> <div>NOTE CALL OUT</div> <div>PRESSURE GAUGE W/PETCOCK</div> <div>DUCT STATIC PRESSURE SENSOR</div> <div>ISOLATION ROOM PRESSURIZATION CONTROLLER</div> <div>DUCT MOUNTED SMOKE DETECTOR, MTD BY HVAC CONTR. SUPPLIED AND WIRED BY ELECTRICAL CONTR.</div> <div>FLOW SWITCH</div> <div>PRESSURE SWITCH</div> <div>THERMOSTAT</div> <div>AUTOMATIC AIR VENT</div> <div>MANUAL AIR VENT</div> <div>PRESSURE PORT ("PETE'S PLUG")</div> <div>FLOAT & THERMOSTATIC TRAP</div> <div>HUMIDIFIER</div> <div>VARIABLE AIR VOLUME BOX</div> <div>DUCT SIZE</div> <div>PIPE SIZE</div> <div>PIPE SIZE, GANG</div> <div>ROOF EXHAUST - EXISTING</div> <div>ROOF EXHAUST - REMOVED</div> <div>ROOF EXHAUST - NEW</div> <div>MANUAL VOLUME DAMPER</div> <div>FIRE DAMPER</div> <div>COMBINATION FIRE SMOKE DAMPER</div> <div>SMOKE DAMPER</div> <div>MOTOR-OPERATED DAMPER</div>	<div>SYMBOLS</div> <div>DESCRIPTIONS</div> <div>EXISTING RECTANGULAR DUCT RUN W/ SIZE DESIGNATION</div> <div>EXISTING CIRCULAR DUCT RUN W/ SIZE DESIGNATION</div> <div>EXISTING FLEX DUCT RUN W/ SIZE DESIGNATION</div> <div>DEMOLITION RECTANGULAR DUCT RUN W/ SIZE DESIGNATION</div> <div>DEMOLITION CIRCULAR DUCT RUN W/ SIZE DESIGNATION</div> <div>DEMOLITION FLEX DUCT RUN W/ SIZE DESIGNATION</div> <div>NEW RECTANGULAR DUCT RUN W/ SIZE DESIGNATION</div> <div>NEW CIRCULAR DUCT RUN W/ SIZE DESIGNATION</div> <div>SHADE DUCTWORK SHALL BE 16 GAUGE SHEETMETAL</div> <div>NEW FLEX DUCT RUN W/ SIZE DESIGNATION</div> <div>NEW RECTANGULAR DUCT - UP</div> <div>NEW CIRCULAR DUCT RUN - UP</div> <div>NEW RECTANGULAR DUCT - DOWN</div> <div>NEW CIRCULAR DUCT RUN - DOWN</div> <div>ACOUSTICALLY LINED DUCT RUN</div> <div>RECTANGULAR TO RECTANGULAR DUCTWORK TRANSITION</div> <div>RECTANGULAR TO RECTANGULAR DUCTWORK TRANSITION</div> <div>RECTANGULAR TO CIRCULAR DUCTWORK TRANSITION</div> <div>ELEVATION CHANGE IN DUCTWORK - UP</div> <div>ELEVATION CHANGE IN DUCTWORK - DOWN</div> <div>DUCTWORK BREAK - TO CONTINUE</div>																								
				<div>MECHANICAL ALTERNATE LIST</div> <table><tr><th>NUMBER</th><th>TITLE</th></tr><tr><td colspan="2">NOTE: REFER TO ARCHITECTURAL DOCUMENTS FOR DEDUCT ALTERNATE ITEMS.</td></tr></table>	NUMBER	TITLE	NOTE: REFER TO ARCHITECTURAL DOCUMENTS FOR DEDUCT ALTERNATE ITEMS.																					
NUMBER	TITLE																											
NOTE: REFER TO ARCHITECTURAL DOCUMENTS FOR DEDUCT ALTERNATE ITEMS.																												
				<div>DIFFUSER SYMBOLS</div> <table><tr><th>SYMBOLS</th><th>ABBREVIATIONS</th><th>DESCRIPTIONS</th></tr><tr><td>□</td><td>RG, RR</td><td>RETURN AIR GRILLE, REGISTER</td></tr><tr><td>□</td><td>EG, ER</td><td>EXHAUST AIR GRILLE, REGISTER</td></tr><tr><td>□</td><td>SD, SR, SG</td><td>SUPPLY AIR 4 WAY DIFFUSER, REGISTER, GRILLE</td></tr><tr><td>□</td><td>SD, SR, SG</td><td>SUPPLY AIR 3 WAY DIFFUSER, REGISTER, GRILLE</td></tr><tr><td>□</td><td>SD, SR, SG</td><td>SUPPLY AIR 2 WAY DIFFUSER, REGISTER, GRILLE</td></tr><tr><td>□</td><td>SD, SR, SG</td><td>SUPPLY AIR 2 WAY DIFFUSER, REGISTER, GRILLE</td></tr><tr><td>□</td><td>SD, SR, SG</td><td>SUPPLY AIR 1 WAY DIFFUSER, REGISTER, GRILLE</td></tr></table>	SYMBOLS	ABBREVIATIONS	DESCRIPTIONS	□	RG, RR	RETURN AIR GRILLE, REGISTER	□	EG, ER	EXHAUST AIR GRILLE, REGISTER	□	SD, SR, SG	SUPPLY AIR 4 WAY DIFFUSER, REGISTER, GRILLE	□	SD, SR, SG	SUPPLY AIR 3 WAY DIFFUSER, REGISTER, GRILLE	□	SD, SR, SG	SUPPLY AIR 2 WAY DIFFUSER, REGISTER, GRILLE	□	SD, SR, SG	SUPPLY AIR 2 WAY DIFFUSER, REGISTER, GRILLE	□	SD, SR, SG	SUPPLY AIR 1 WAY DIFFUSER, REGISTER, GRILLE
SYMBOLS	ABBREVIATIONS	DESCRIPTIONS																										
□	RG, RR	RETURN AIR GRILLE, REGISTER																										
□	EG, ER	EXHAUST AIR GRILLE, REGISTER																										
□	SD, SR, SG	SUPPLY AIR 4 WAY DIFFUSER, REGISTER, GRILLE																										
□	SD, SR, SG	SUPPLY AIR 3 WAY DIFFUSER, REGISTER, GRILLE																										
□	SD, SR, SG	SUPPLY AIR 2 WAY DIFFUSER, REGISTER, GRILLE																										
□	SD, SR, SG	SUPPLY AIR 2 WAY DIFFUSER, REGISTER, GRILLE																										
□	SD, SR, SG	SUPPLY AIR 1 WAY DIFFUSER, REGISTER, GRILLE																										

CONSULTANTS:

SPECIFICATIONS:

Lowell Specifications
34 Marc Avenue
Topsham, ME 04802
Tel: (207) 406-4001
Email: keith@lowellspecs.com



ARCHITECT/ENGINEERS:



Drawing Title

MECHANICAL - LEGEND AND GENERAL NOTES

Approved: Project Director

Denis McLaughlin
Telephone: 857-364-5149

Project Title

WEST ROXBURY GARAGE

Location

VAMC - West Roxbury, MA 02132

Date

6/15/2015

Checked

CMP

Drawn

ERD

Project Number

523-400

Building Number

Drawing Number

MH001

Dwg: 57 of 99

Office of
Facilities
Management



100% BID DOCUMENTS

100% BID DOCUMENTS

		CONSULTANTS:				ARCHITECT/ENGINEERS:		<div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></div><div></div></div></div><div><div><div><div></div><div></div><div></div><div></div></div><div><div></div><div></div><div></</div></div></div></div></div></div></div></div></div>	
--	--	---------------------	--	--	--	-----------------------------	--	---	--

100% BID DOCUMENTS

VA FORM 08-6231, OCT 1978

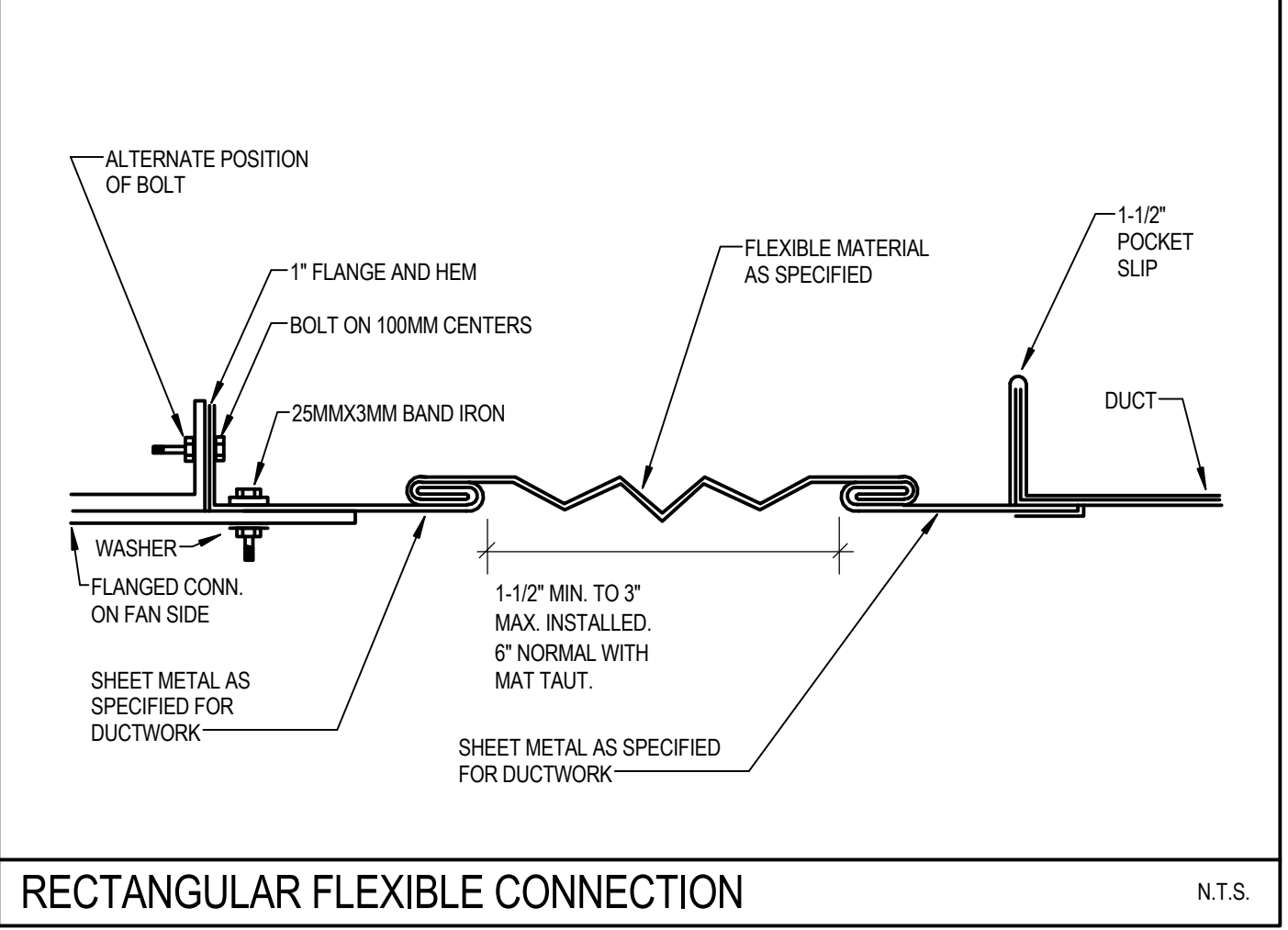
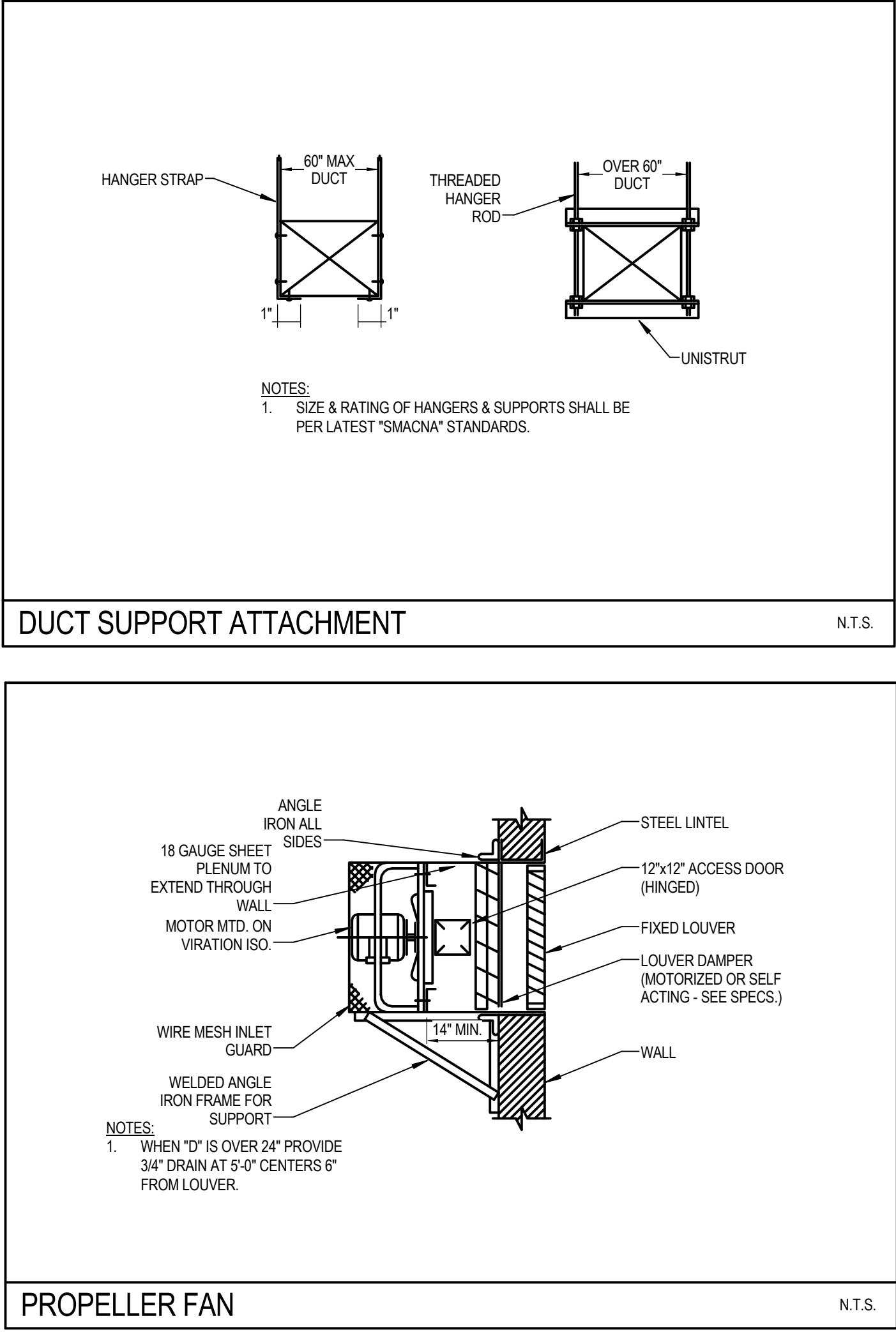
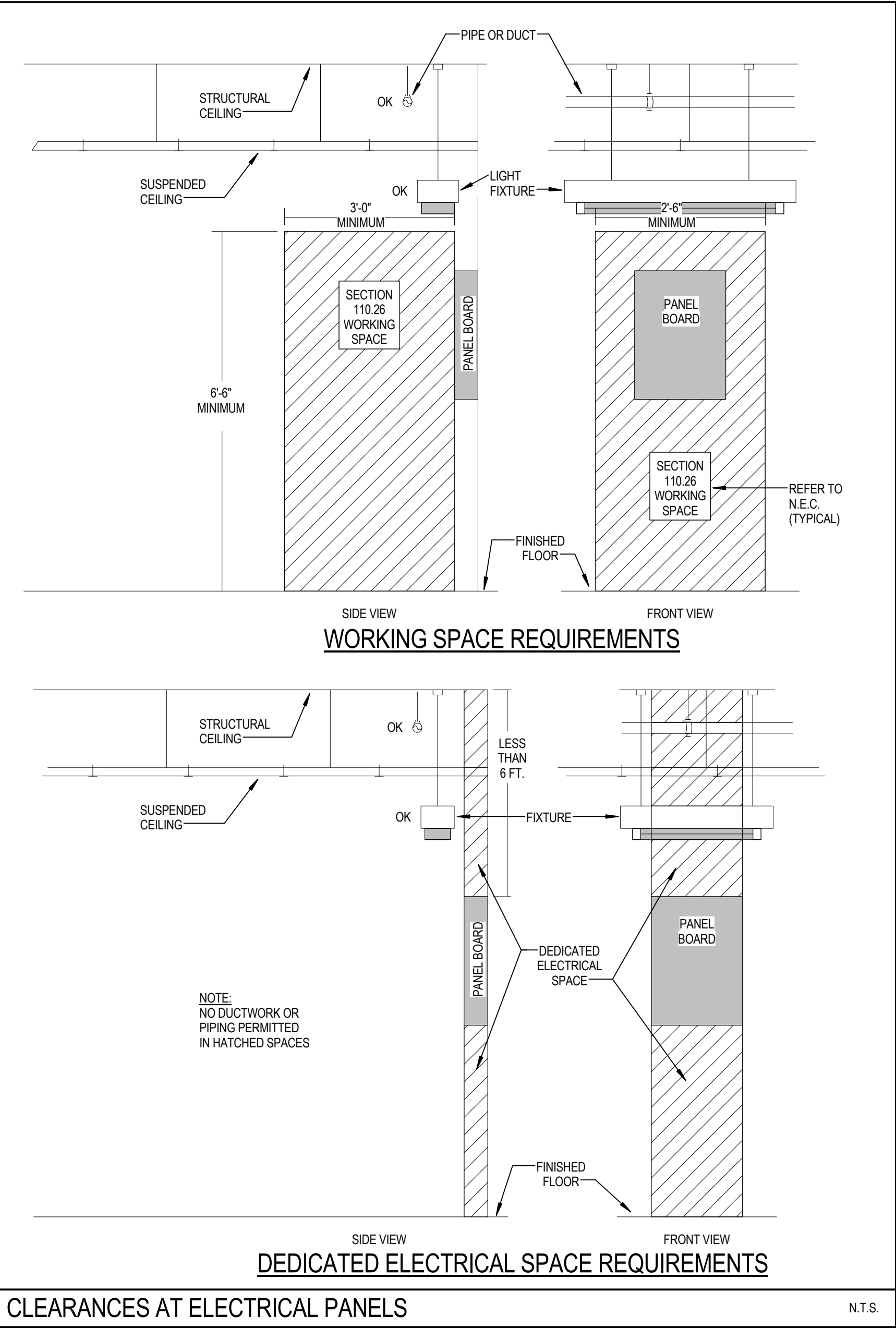
100% BID DOCUMENTS

VA FORM 08-6231, OCT 1978

1
2
3
4
5
6
7
8
9

A
B
C
D
E
F

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



100% BID DOCUMENTS

Revisions:	CONSULTANTS:		ARCHITECT/ENGINEERS:	 ARCHITECTURE INTERIOR DESIGN PLANNING 49 DARTMOUTH STREET PORTLAND, ME 04101 207-775-1059 www.pdtarchs.com	 482 Payne Road Scarborough, ME 04074 Tel: (207) 883-3355 Fax: (207) 883-3376	 75 York Street, Portland, Maine 04101 207.879.1838 ■ beckerstructural.com	Drawing Title MECHANICAL - DETAILS	Project Title WEST ROXBURY GARAGE	Project Number 523-400	Office of Facilities Management 	
								Location VAMC - West Roxbury, MA 02132	Building Number		
								Approved: Project Director Denis McLaughlin Telephone: 857-364-5149	Drawing Number MH501		
								Date 6/15/2015	Checked CMP		Drawn ERD

VA FORM 08-6231, OCT 1978

SPLIT SYSTEM DUCTLESS HEAT PUMP SCHEDULE																																										
INDOOR UNIT MARK	OUTDOOR UNIT MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	TOTAL SUPPLY AIR FLOW	MIN. OUTSIDE AIR FLOW	EXT STATIC PRESSURE	COOLING CAPACITY												HEATING CAPACITY				AIR FILTER MARK NO.	ELECTRICAL DATA								SUPPLEMENTAL HEAT			REMARKS						
								MIN TOTAL CAPACITY		MIN SENS CAPACITY		EAT				OSA DESIGN TEMP	COMP Kw	MIN HEAT CAPACITY		EAT DB		LAT DB	OSA DESIGN TEMP		INDOOR FAN		OUTDOOR UNIT FAN		MCA	PHASE	VOLT											
								MBH	[kW]	MBH	[kW]	°F	[°C]	°F	[°C]			°F	[°C]	MBH	[kW]				°F	[°C]	°F	[°C]				HP	[W]	CONTROL	HP		[W]	CONTROL				
HP-1	CU-1	LEVEL 1	IT, RM	MINSPLIT HP	247	[120]	0	[0]	.25	[.03]	12	[41]	10	[3]	18	88	[31]	74	[23]	88	[31]	17	[5]	40	[4]	100	[36]	5	[15]	-	[17]	ECM	-	[39]	ECM	[62]	1	208-230	-	-	-	-
NOTES: 1. FURNISH FRONT AND BACK WIND BAFFLES, WIRED CONTROLLER, CONDENSATE PUMP. 2. FURNISH DIRECT WIRED CONDENSATE PUMP.																																										

FAN SCHEDULE																									
MARK	LOCATION	AREA AND/OR BLDG SERVED	SYSTEM AND/OR SERVICE	AIR FLOW		TSP		FAN								MOTOR ELECTRICAL						CONTROL SEQUENCE	REMARKS		
				CFM	[L/s]	IN	[Pa]	TYPE	WHEEL	CLASS	ARRANGEMENT, ROTATION, AND DISCHARGE	IN	[mm]	MIN % EFF	DRIVE	FAN MAX RPM	NOMINAL POWER			PHASE	VOLT			RPM	SPEED CONTROL
EF-1	LEVEL 1	GARAGE	SPRINKLER ROOM	150	[71]	0.267	[67]	SIDEWALL	PROP.	I	-	9	[230]	75%	DIRECT	1550	0.03	0.033	[]	1	120	1550	NONE	COOLING T-STAT	—
EF-2	LEVEL 1	GARAGE	EMER. ELEC. ROOM	150	[71]	0.267	[67]	SIDEWALL	PROP.	I	-	9	[230]	75%	DIRECT	1550	0.03	0.033	[]	1	120	1550	NONE	COOLING T-STAT	EMER POWER
EF-3	LEVEL 1	GARAGE	ELEC ROOM	850	[400]	0.392	[98]	SIDEWALL	PROP.	I	-	12	[300]	75%	DIRECT	1750	0.18	0.25	[]	1	120	1750	NONE	COOLING T-STAT	—
					[]		[]																		
NOTES																									
PROVIDE EXHAUST FANS WITH STARTER, DISCONNECT, MOTORIZED DAMPER, AND MOTOR GUARD.																									
ALL SELECTIONS ARE BASED ON AN ALTITUDE OF 30 FT.																									

AIR DEVICE SCHEDULE (RETURN)																
MARK	TYPE	AIR FLOW				MAX APD		MOUNTING	PANEL/FRAME SIZE		NECK SIZE		NC	DAMPER	FINISH	REMARKS
		MIN		MAX												
		CFM	[L/s]	CFM	[L/s]	IN WG	[Pa]		IN x IN	[mm x mm]	IN x IN	[mm x mm]				
RG1	LOUVERED GRILLE	0	[]	800	[380]	0.100	25.000	SURFACE	20X14	[500 x 360]	18x12	[457 x 304]	30	NONE	WHITE	45 DEG. ALUMINIUM
NOTE																
1. PROVIDE SQUARE TO ROUND ADAPTER.																

AIR DEVICE SCHEDULE (SUPPLY)																
MARK	TYPE	AIR FLOW				MAX APD		MOUNTING	PANEL/FRAME SIZE		NECK SIZE		NC	DAMPER	FINISH	REMARKS
		MIN		MAX					IN x IN	[mm x mm]	IN	[mm]				
		CFM	[L/s]	CFM	[L/s]	IN WG	[Pa]									
SG1	LOUVERED GRILLE	0	[]	800	[380]	0.100	[25]	SURFACE	20X14	[500 x 360]	18x12	[178 #]	<30	NONE	WHITE	DOUBLE DEFLECTION 45 DEG ALUM
NOTES																
1. SEE FLOOR PLAN FOR THROW PATTERN.																

ELECTRIC UNIT HEATER AND ELECTRIC BASEBOARD SCHEDULE																		
MARK	LOCATION	AREA AND/OR BLDG SERVED	TYPE	AIR FLOW		EAT		MIN CAPACITY		POWER			FAN MOTOR			REMARKS		
				CFM	L/S	°F	[°C]	BTU/H	[W]	AMP	PHASE	VOLT	FAN POWER		PHASE		VOLT	
UH-1	SEE PLANS	SEE PLANS	HORIZ	270	[130]	25	[-4]	8553	[2000]	15	1	208	N/A	[W]		1	208	---
EBB-1	SEE PLANS	SEE PLANS	BASEBOARD	N/A	N/A	N/A	N/A	8553	[2500]	-	1	208	N/A	N/A		N/A	N/A	
					[]				[]					[]				

DUCTED AIR COOLED SPLIT HEAT PUMP UNIT SCHEDULE																											
INDOOR UNIT TAG	OUTDOOR UNIT TAG	ROOM SERVED	INDOOR DX FAN COIL				INDOOR DX FAN COIL - COOLING MBTU				INDOOR DX FAN COIL - HTG. MBTU				INDOOR DX FAN COIL - ELECTRICAL			OUTDOOR CONDENSING UNIT			OUTDOOR CONDENSING UNIT - ELECTRICAL			REFRIGERANT PIPE	MITSUBISHI MODEL (INDOOR)	MITSUBISHI ELECTRIC MODEL (OUTDOOR)	NOTES
			TYPE	FUNCTION	CFM LO-MED-HI	SIZE/WEIGHT	SENSIBLE	LATENT	TOTAL	INDOOR °F	OUTDOOR °F	TOTAL	INDOOR °F	OUTDOOR °F	VOLTAGE	MIN. AMPACITY	MOCP	SIZE/WEIGHT	COMPRESSOR(S)	FAN(S)	VOLTAGE	MIN. AMPACITY	MOCP				
HP-2	CU-2	EMR 101	CEILING SUPENDED	COOLING ONLY	512-636-742	44"Wx29"Dx10"H/73 LBS	16.3	7.7	24	77	95	6	45	17	208V/1P	2.63 AMPS	NA	38"Wx15"Dx38"H/163 LBS	1	1	208V/1P	18 AMPS	30 AMPS	-	PEAD-A24AA4	PUZ-A24NH4	1, 2, 3, 4, 5, 6
NOTES: 1. OUTDOOR UNIT MOUNTING BASE. 2. WIRED REMOTE CONTROLLER. 3. SEA/COAST PROTECTION WITH BLUE FIN ANTI-CORROSION TREATMENT ON CONDENSER COIL. 4. 0.6INWG EXTERNAL STATIC PRESSURE. 5. BUILT-IN CONDENSATE PUMP (28" LIFT). 6. REFRIGERANT PIPE SHALL BE SIZED BY MANUFACTURER.																											

[illegible]